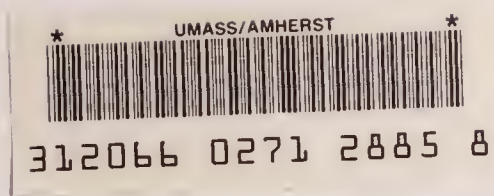


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Learning to Compete: Linking Youth to Careers

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Commonwealth of Massachusetts
School to Work Opportunities System

April 1, 1994

William F. Weld
Governor

Argeo Paul Cellucci
Lieutenant Governor

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Learning to Compete: An Introduction to the Massachusetts School to Work System

The Commonwealth of Massachusetts proposes to implement its action plan for a statewide School to Work Opportunities system as outlined in this application for a federal implementation grant. Massachusetts has developed a broad agreement among state, regional, and local level stakeholders on a vision to create a statewide school to work transition system that reaches half of all high school seniors by the year 2000. In Massachusetts, there has been a significant level of effort in testing out new approaches to school to work transition. As the result of top-level discussions among all the stakeholders, we have developed specific strategies to pull together these efforts into a coherent, comprehensive statewide system. By submitting this application, Massachusetts is signaling its readiness to undertake broad scale change on behalf of students and employers.

The effort to implement an entire statewide system of school to work transition involves action on several fronts at the state, regional, and local levels. We have tried to organize our system development around key themes as expressed in the School to Work Opportunities Act: new learning strategies for in-school youth, incorporating worksite learning, addressing the needs of out-of-school youth, connecting activities, and system/program measurement. The complex set of tasks outlined in this implementation plan are all aimed and moving forward on a difficult agenda in these five areas.

Through a fortunate and timely concurrence of statewide policy development and federal leadership, the Commonwealth has defined a system that operates on the principles expressed in the School to Work Opportunities Act. Last spring, the Massachusetts Legislature enacted the Education Reform Act of 1993 (ERA). Its enactment made possible two significant sets of events. First, the ERA contains every element of systemic education reform that is critical to reorganizing secondary and postsecondary education to meet the challenges of high academic standards and preparation for a world-class future. A framework for a new Massachusetts education system has been established through sustained discussion and unprecedented leadership by the state's private sector.

Second, enactment of the ERA made possible a focused discussion by leaders and policymakers in the state's education and training system that developed a comprehensive approach to school to work transition. In early summer of 1993, the MassJobs Council (MJC) — Massachusetts' multi-sector policy-making and coordinating body for all employment and training programs — established the MassJobs Council School to Work Task Force to design a system of school to work transition that responded to

both to the reforms contained within the ERA and to federal policy discussions related to the School to Work Opportunities Act.

The Task Force was co-chaired by Piedad Robertson, Secretary of Education, and William J. Spring, Vice President of the Boston Federal Reserve Bank and a member of the MJC. The Task Force effort was staffed jointly by the MJC and the Executive Office of Education, with staff from all agencies participating on issue-specific working groups. Members of the Task Force are listed in Appendix One.

The Task Force and working groups of agency and private-sector participants have been holding meetings, conducting research, convening regional roundtables throughout the state, and weighing options — all for the specific purpose of designing a system of school to work transition that meets the needs of the state and that reaches significant statewide coverage by the year 2000.

The Task Force process helped us all understand current conditions as they relate to our vision of a statewide system. We know much more about the numbers of students moving through today's education system. We know a great deal about the structure of our sub-state regional economies and the availability of jobs and training opportunities for youth. We have assembled inventories of current programs that serve the needs of in-school youth, at-risk youth, and school dropouts, or that provide job training, access to employment, or other connecting activities.

We are developing concrete, agreed-upon plans for the immediate next steps as well as tasks that build toward our vision at the school building level (the most discrete unit), the school district level, the regional level, and the state level. We feel confident that this state is ready to implement a system that will meet our own needs and expectations, and is in harmony with the federal initiative.

The Task Force process was designed to elicit support and commitment from all partners. It has been the process by which we obtained clear input from the business sector and other key groups. This proposal bears the imprimatur of the Task Force and the MJC, and demonstrates our full commitment to develop a comprehensive, integrated school to work transition system.

Massachusetts has established not only a statutory foundation and nationally recognized demonstration programs, but also a comprehensive framework for an effective school and work system. Most importantly, we have achieved consensus among major stakeholders for the accomplishment of this vision as well as the next steps toward making the vision a reality. The components of our approach to educating our next generation clearly place Massachusetts in the lead among all states in expressing a comprehensive policy and statutory foundation for education.

This application for a federal implementation grant sets forth a specific blueprint for action by all system partners in the Commonwealth. Massachusetts has shifted from the conceptual stages of planning and design to actual development and implementation. The Massachusetts plan for a statewide system

of school to work transition builds on long-standing strengths and an array of components that are equal to the task of forging a statewide system:

- ❖ the framework of the Education Reform Act — the most recently articulated, and comprehensive, of any state's approach to systemic education reform;
- ❖ development of a 'common core of learning' that clearly establishes a broad standard for what all students must know and be able to do;
- ❖ the leadership of the MassJobs Council — the state's 'super council' that has a six-year operating history of policy development, coordination, and public-private partnership in employment and training (with members drawn from the private sector, Secretary of Education, Commissioner of Education, Commissioner of Labor, Commissioner of the Department of Employment and Training, Secretary of Economic Affairs, and others);
- ❖ the unprecedented leadership, support, and collaboration of state agencies, the private sector, and other key stakeholders;
- ❖ an operating network of Regional Employment Boards (REBs) — regional bodies reflective of community and area business interests that convene regional stakeholders, set policy and allocate resources in employment and training — and which are empowered by the ERA to act as regional school to work planning entities;
- ❖ the examples of youth education and employment programs set by Boston, which has a long-standing history of developing innovative efforts such as the Boston Compact, Project ProTech, YouthBuild, and others — nationally acclaimed programs that themselves gave inspiration and meaning to much of the STWOA;
- ❖ the leadership of the state's business community, which is poised to take active roles at the state, regional, local, and firm levels in providing integrated work and learning experiences;
- ❖ the strong commitment of regional vocational and technical high schools that are using competency-based curricula and have strong ties to local business leaders;
- ❖ regionally-based community colleges that have established community relationships as well as years of experience in providing services that meet a broad range of needs in three primary areas: economic development, job training, and education for at-risk youth;
- ❖ the multi-community partnership Communities and Schools for Career Success (CS²), which is establishing community entrepreneurs to build support and help coordinate resources on behalf of developmental school-to-adult transition needs of students;

- ❖ new ways to reach at-risk students, recover dropouts, and encourage students enrolled in alternative education programs to participate and meet challenging standards;
- ❖ improved transition planning for students with disabilities that is based on establishing broad-based local planning teams; and
- ❖ a wide variety of other existing, innovative school-based, work-based, connecting activities, and private sector networking programs, within schools and at community colleges, and Tech Prep consortia, that provide both experience and structures upon which a comprehensive system of integrated school and work learning can build.

These are the foundations of the Massachusetts system. We have carefully designed a system whereby Massachusetts and local communities determine goals and priorities, develop new strategies, and measure progress toward achieving formidable benchmarks. The MJC School to Work Task Force established for itself the requirement to 'design a system that is appropriate for Massachusetts and can operate at scale by the year 2000.' This is an ambitious goal. However, an interested and bipartisan group of state leaders are determined that the actions, structures, initiatives, and programs outlined in this blueprint *will* lead to a statewide system in the next six years.

Developing a Vision for a School to Work System — The MassJobs Task Force

The vision, basic design of the school to work system, and this application for a federal implementation grant are all products of a nine-month policy process led by the MassJobs Council School to Work Task Force. The Task Force was appointed by the MJC at its May 1993 meeting, and comprised 30 members designed to be inclusive of all key stakeholder groups. The Task Force formed an interagency working group that addressed specific issues and pursued an ambitious research agenda. Among other issues, the Task Force: (a) discussed the legislative specifications for the STWOA as they existed at the beginning of the summer in 1993; (b) reviewed policy and implementation efforts in leading edge states; (c) assessed the key features of the Education Reform Act that affected school to work transition; (d) researched best-practices of work-based learning programs at the secondary school level throughout the Commonwealth; (e) prepared an analysis of the economic structure of sub-state regional economies and the current labor market demand for and experiences of young people; (f) conducted regional roundtables in conjunction with REBs, soliciting input, ideas, and support from employers, community colleges, schools, CBOs and others at the local and regional levels; and (h) held

Massachusetts public high school seniors and young adults, and assessed the industries and occupations where youth training has the highest prospects of success. While the material is too lengthy to be included in this proposal (summaries appear in Appendix Two), a few observations are relevant:

- ❖ The need for an effective school to work structure is demonstrated by the stark deterioration of earnings in constant dollars from 1973 to 1992, not only for dropouts (-41.9%), but for those with only a high school degree (-32.0%).

**Mean Real Earnings of Males, Aged 20-29,
Who are Not in Schools**

	1973	1992	% Change
All Males			
High school dropout	17,082	9,924	-41.9%
High school graduate	22,770	15,488	-32.0%
Black Males			
High school dropout	11,664	6,041	-48%
High school graduate	18,335	10,681	-41.7%

- ❖ There is renewed job growth in Massachusetts. This state is currently going through an economic recovery while at the same time continuing the pattern of fundamental structural change. From 1988 to 1992 the state lost 380,000 wage and salary jobs (12 percent of all jobs statewide). In the past two years alone, the state generated a net increase of about 47,000 jobs (a 2 percent increase, for a total job base of about 2.4 million in 1993. Of sixteen regions, only two failed to show growth.
- ❖ Growth has been uneven across industrial sectors. Manufacturing sectors continue to show relative job loss. Service sector employment accounted for eight of every ten net new jobs.
- ❖ High school students show uneven patterns of working while in high school, but it is clear that work predicts post high school job success. Most high school seniors (more than 50 percent) hold part-time jobs. At least up until a student works 20 hours each week, holding jobs does not appear to adversely affect the amount of time devoted to homework or school.

CLMS also prepared an analysis of 'criteria occupations' — occupations that have 2/3 of their members with 14 years of education or less, while earning annual wages that are in excess of \$24,000 per year. Of all criteria occupations, the ones that have a significant concentration of employment as well as the occupational areas that show the strongest growth represent the most likely areas for development of integrated school and work programs. The summary of this analysis appears in Appendix Two. It is no surprise, for example, that medical technician jobs are prime candidates for

ongoing discussions defining a comprehensive approach to school to work transition. The final report of the Task Force will be published in April of 1994.

The Task Force designed a comprehensive, decentralized school to work system that will, by the year 2000:

- ❖ afford all young people in Massachusetts an opportunity to learn and demonstrate mastery of a common core of skills at the 10th grade level and permit access by one-half of each age cohort to a structured sequence of integrated work and learning activities at the secondary and postsecondary level;
- ❖ lead to the award of a skill certificate that represents demonstrated mastery of essential industry-recognized skills;
- ❖ provide businesses in the Commonwealth with workers that are educated according to both broadly-recognized academic standards and industry-specific skill standards;
- ❖ empower local business, education, community, labor and political leaders to work collaboratively to determine the specific mix of work and learning activities that are most appropriate for each community;
- ❖ provide all young people who participate with individualized counseling, career search assistance and job market guidance on an ongoing-basis;
- ❖ provide all students with a portfolio that documents the specific academic and industry-recognized occupational skills that they have mastered;
- ❖ encourage all students and high school dropouts to continue their education beyond high school and into postsecondary instruction;
- ❖ give all key stakeholders timely and accurate information about the labor market and educational experiences of program graduates over time; and
- ❖ establish performance standards for educational and labor market outcomes for young people, which include both academic and occupational mastery and school and labor force participation.

Employment Prospects for Massachusetts Youth

Northeastern University's Center for Labor Market Studies has prepared a detailed, sub-state regional analysis of the Massachusetts economy, reviewed the employment and earnings experiences of

career pathway programs. Draft data shows that category of criteria jobs increased by more than 80 percent in the decade from 1980 to 1990.

A Strategic System

Throughout the Task Force process, we made a concerted effort to develop a system of school to work transition that meets the needs of the Commonwealth through the framework of the federal School to Work Opportunities Act. In doing so, we addressed the learning needs of both in-school and out-of-school youth, determined how best to organize industries to establish broad industry skill standards and encourage employers to provide work-based learning opportunities, and drew on the strengths of existing partners to provide a wide range of connecting activities that not only link students to programs but help keep the institutional partners bonded.

One essential quality of the Task Force planning concerns how the state can reach half of all high school seniors in formal school to work activities by the year 2000. While many strategies address ways to develop or adapt programs that create new pathways for students, Massachusetts has also emphasized strategies for reaching students 'where they are' — that is, formalizing learning by using traditional youth jobs as a major part of the state's effort. We have a three-part approach to creating local STWO programs that: (a) develops new efforts by organizing strategic industry clusters; (b) encouraging integration between school and work in other industry sectors; and (c) organizing integrated programs around jobs traditionally held by high school students. We will focus much effort on converting youth jobs into opportunities to develop specific workplace competencies and as a foundation from which to learn all aspects of an industry.

Our strategic approach resulted in three overall approaches, which are explained in this next section:

- ◆ The system will be developed by building on key industry clusters that reflect strategic economic priorities of each sub-state economic region.
- ◆ The system is built on the framework of the Education Reform Act, so that the system of school to work transition is in harmony with fundamental reforms taking place within the broader system of education.
- ◆ Oversight and management takes place under the auspices of the MassJobs Council and the network of Regional Employment Boards to assure that the school to work system meets its

ambitious goals and that it is a part of a comprehensive workforce development system already under construction within the Commonwealth.

In early 1992, Governor William F. Weld called for the preparation of a state economic strategy as part of his overall commitment to improve the state's economic climate. The product of that process, *Choosing to Compete: A Statewide Strategy for Job Creation and Economic Growth*, supports long-term investment in education and in the introduction of new management approaches and procedures by the public and private sectors (*Choosing to Compete* appears in Appendix Three)

As a result, Massachusetts is recognized as a leading state in making fundamental changes to economic development, education, and workforce development policy to assist students, workers and employers adjust to structural economic change. The state's aggressive efforts have served as a catalyst for systemwide reform efforts to stimulate long-term economic growth, designed in substantial part and managed at the local level by key community stakeholders. This fundamental approach to workforce development makes it possible to design a statewide school to work transition system that will reach scale. The strategy has three key components:

1. **Industry clusters.** A central organizing principle, **industry clusters**, provides a concrete way to organize small to mid-sized firms to provide work-based learning activities throughout the state. The competitive advantage of the Commonwealth is reflected in the competitiveness of the state's base industries and industry clusters. An 'industry cluster' is a group of firms, suppliers and customers, specialized research centers and skilled labor pools. Clusters increase the economic competitiveness of individual firms because each firm is able to draw on common skills, ideas and innovations generated by the cluster as a whole that would not be present if the firm operated in isolation.

The Commonwealth's school to work system will develop school to work programs that support the education, training, and workforce development needs of critical and emerging industries and industry clusters in each region. Key industry clusters have already been identified within each sub-state region in a process lead by each Regional Employment Board. Complete listing of critical and emerging industries, along with targeted occupational clusters and skills, is contained in *Choosing to Compete*, attached as Appendix Three. The following table presents summary identification of key industries by sub-state region. These industries are the priorities for organizing school to work programs in each region.

**Table One — Critical and Emerging Industry Sectors
by Sub-state Region in Massachusetts**

Berkshire Regional Employment Board	Health care, plastics, paper and paper products, aerospace, tourism, retail trade, telecommunications
Boston Regional Employment Board	Financial services, health care, business services, higher education, government, biotechnology, environmental
Bristol Regional Employment Board	Health services, medical equipment, electronics, apparel/textiles, wholesale trade, metalworking, marine sciences (including marine biotechnology, marine electronics and communications, aquaculture and composite materials), environmental technology, telecommunications, business services, specialty manufacturing
Brockton Regional Employment Board	Health services, food distribution, financial services, education, wholesale distribution, precision manufacturing, transportation, packaging
Cape Cod and the Islands Regional Employment Board	Tourism and related industries, retail trade, business support services, marine technology, health, environmental services, information technology
Franklin/Hampshire Regional Employment Board	Education services, manufacturing, health services, tourism, agriculture, environmental technology, specialty food products, specialty manufacturing
Hampden County Regional Employment Board	Paper and paper products, health and allied health services, fabricated metals, industrial machinery and equipment, printing and publishing, advanced materials manufacturing, artificial intelligence, aircraft engineering, environmental technology, instruments
Lower Merrimack Valley Regional Employment Board	Telecommunications, metal fabrication, textiles, electrical instruments, health services, biotechnology, environmental services, plastics and ceramics, tourism
Metro North Regional Employment Board	Health services, precision manufacturing, higher education, software development, financial services, biotechnology, environmental technology, telecommunications
Metro South/West Regional Employment Board	Computer services, education, measuring and controlling devices, equipment manufacturing, tourism and recreation, environmental and biotechnical services
New Bedford Regional Employment Board	Manufacturing, fishing, services, construction, financial services
North Central Regional Employment Board	Plastics, paper and paper products, machine tooling, metalworking, health services, printing and publishing, fiber optics, instruments, chemicals, wood products
Greater Lowell Regional Employment Board	Information technology, health care, financial services, electronics, precision manufacturing, biotechnology, environmental technology
North Shore Regional Employment Board	Health services, instruments manufacturing, transportation, telecommunications, biomedical manufacturing, environmental services, composite materials, aquaculture
South Coastal Regional Employment Board	Health services, financial services, environmental technology, tourism, biotechnology, construction

Southern Worcester Regional Employment Board	Insurance, health services, metalworking, plastics, biotechnology, construction, fiber optics, advanced materials manufacturing
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Based on the needs of each region, as reflected in Table One, on the information in Appendix Two, and the sub-state regional economic information prepared by Northeastern University's Center for Labor Market Studies, the Commonwealth of Massachusetts has developed the following list of industries that are strategic priorities for the development of industry-specific skill standards and program development:

- ◆ health care and health services;
- ◆ financial services;
- ◆ metalworking;
- ◆ biotechnology;
- ◆ environmental technology;
- ◆ instruments and precision manufacturing;
- ◆ fiber optics, telecommunications and information technology;
- ◆ advanced materials and composites technology;
- ◆ travel and tourism;
- ◆ marine sciences; and
- ◆ business services

2. Education Reform: Implementation of the Massachusetts Education Reform Act of 1993. Last June, Governor William F. Weld signed into law the Massachusetts Education Reform Act of 1993, which establishes a set of bold initiatives that moves Massachusetts to the forefront of education reform in the nation. A major impetus for reform came from a consortium of private sector leaders, the Massachusetts Business Alliance for Education, who emphasized the undeniable link between the future success of students and that of industry. Other statewide business groups, including the Associated Industries of Massachusetts, the Massachusetts Business Roundtable, the High Technology Council and CEOs for Fundamental Change in Education, advocated vigorously for the overhaul of public

education. Key policy leadership also came from the Executive Office of Education and the Commissioner of Education.

The four major goals of the ERA relate directly to the establishment of a school to work system in the Commonwealth. The Department of Education (DoE), under the leadership of the Secretary of Education, the Commissioner of Education, and the Board of Education, have established the following goals, activities, and timelines for implementation (where appropriate). These have been published in greater detail in *Education Reform Act of 1993: Department of Education Implementation Plan, Phase One Scope of Work* which appears in Appendix Four.

- ❖ **New Standards to Ensure High Student Achievement.** The Education Reform Act establishes the Massachusetts Commission on the Common Core of Learning, whose purpose is to identify what all students should know, value and be able to do. In June of 1994, the Commission will report its findings, which will be translated into curriculum frameworks and new procedures for assessments.

Academic standards for all students will be reflected in the criteria established for three certificates — Competency Determination, Certificate of Advanced Mastery and Certificate of Occupational Proficiency. Academic standards for these certificates must be established by January 1995.

Under the Act, Massachusetts is establishing new curriculum frameworks, academic standards and a student assessment system. These will ensure that statewide curriculum integrates academic and occupational instruction; that statewide standards are uniform and equivalent to those established under the Goals 2000: Educate America Act; and that the statewide assessment system assists students in selecting an appropriate pathway and accurately measures work-based achievement as part of a student's overall performance. Frameworks for math and science are almost ready for draft publication, by virtue of the Commonwealth's receipt of a National Science Foundation grant under the SSI program. Frameworks for all other subjects (except the arts) are required to be developed by January 1995.

The assessment system will use authentic assessments tools and environments, including portfolio assessment. The state will conduct individual diagnostic student assessments annually in grades 4, 8, and 10.

The Act also requires that, by June of 1994, each school district must prepare a plan to eliminate the general educational track. The Commissioner of Education must submit a statewide plan for the elimination of the general educational track to the BoE and the

legislature by December 1995. It is envisioned that, as a result, all students will make an affirmative selection among pathways. The Act specifically provides for the establishment of school to work standards, a grant process for the identification of new program initiatives, and the integration of academic with occupational education, secondary with post-secondary education and work-based with school-based learning.

Finally, the Act's provision for establishing 'dual enrollment' allows qualified high-school students to enroll in a Massachusetts institution of higher education and earn both secondary and postsecondary credits. This provision encourages and enables the integration of secondary with postsecondary education — one component of a leading-edge school to work system.

- ❖ **A New Governance Structure to Encourage Innovation and Accountability.** The Education Reform Act establishes a new system of educational governance that places the authority to make decisions at the local level. The ERA provides mechanisms to effectively engage in developing a statewide school to work system by ensuring that the newly adopted systems for evaluating schools and districts, as well as newly established parent councils (within each school), school-based management organizations and advisory councils prioritize school to work programs and policies in the design, implementation and evaluation of school and district programs across the state.
- ❖ **Enhancing the Quality, Professionalism and Accountability of Educational Personnel.** Ultimately, successful learning depends on the quality of instructional staff. One goal of education reform sets out to enhance quality by requiring all educational personnel to engage in ongoing professional development and by holding them accountable to performance standards. By establishing new standards, regulations and processes for certifying and recertifying school personnel, the ERA affords Massachusetts an opportunity to design and develop certification and recertification methods that encourage requirements commensurate with the needs and goals of a school to work program (e.g., certification examinations that test subject matter knowledge, not pedagogical skills, and processes that encourage work-based training, not master's degrees). DoE/BoE will publish re-certification standards for school principals by June 1994; it has already published new regulations for the recertification of teachers and other professionals. DoE/BoE published a statewide plan for professional development in January of 1994.
- ❖ **A Fair and Equitable System of School Finance.** Central to the success of education reform is the establishment of a system of school finance that provides all schools with adequate resources in a fair, equitable and stable manner. The Education Reform Act establishes a funding mechanism to provide all schools with adequate resources that may be directed, in part, to support school to work activities. DoE has identified specific tasks related to foundation

school budgets, school spending waivers, school choice reimbursement, adult education funding, and intra-district equity in fund distribution. The Department has also laid out a seven year funding schedule for additional state-level administration and development costs associated with the sweeping reform.

3. **Reinventing the Workforce Development System.** *Choosing to Compete* serves as a blueprint for how the Massachusetts state government — in partnership with business, labor, and the research and education communities — will create an environment for business innovation and job creation. In developing the Massachusetts school to work system, the state will focus its energies on mobilizing public opinion, setting standards, providing resources and documenting results. The operational planning for a Massachusetts school to work system must take place among business, education, labor, community, and government leaders at the local and regional levels.

Led by the Department of Employment and Training, Massachusetts has built a functioning system of Private Industry Councils begun in 1979 (after enactment of the 1978 CETA amendments that authorized creation of PICs). The PIC provides leadership for innovative private sector programs at the labor market level, and statewide led to a sustained discussion of the necessity of building a broader training system.

In 1988 the PICs were designated as 'Regional Employment Boards' by state legislation and mandated to coordinate the workforce development system. The Weld-Cellucci Administration has put considerable resources into making that vision a reality. Under this leadership, the REBs have been documenting more than \$700 million in training system expenditures, region-by-region. More recently, REBs were designated a building block for school to work transition.

1988 legislation empowered the MassJobs Council (MJC) to become the nation's first statewide 'super council' to oversee all programs affecting employment and training of persons who are outside of the K-12 education system. MJC is the governor's principal advisory board for workforce development and has the statutory responsibility to coordinate all employment, training and employment-related education programs in the Commonwealth. A parallel system of private sector-led Regional Employment Boards was established to serve as a 'board of directors' for all job-related education and training programs at the local level. The membership of the MassJobs Council is listed in the latest *MJC Annual Report*, which appears in Appendix Five.

As the principal policy board, MJC is the vehicle for incorporating input regarding policy development and implementation from all sectors and constituents of the workforce development system. Its membership represents all partners at the state level: the Governor, Secretary of Education, Commissioner of Education, Commissioner of the Department of Employment and Training, Secretary of Labor, Secretary of Economic Affairs, the private sector, organized labor, the state legislature, the rehabilitation agency, and others. It is chaired by the Lieutenant Governor Argeo Paul Cellucci, and co-chaired by a private sector business executive. Its meetings seek input from practitioners and consumers at many levels. Furthermore, as a result of the Education Reform Act, it will receive annual school to work planning reports from regional entities that are on the front lines of system implementation.

The state's Regional Employment Boards have a central role to play in the MJC's vision of a comprehensive workforce development system. REBs typically draw their multi-sector membership from a variety of organizations within the region including employers, school superintendents, vocational school directors, community college presidents, organized labor, community-based organizations, and municipal government. Over the past two years, the MJC has initiated a variety of efforts to help build the capacity of the REBs to take a leadership role in setting policy and providing program oversight. Increasingly, the REBs are viewed as 'conveners' who can help translate broad state policy priorities into local action by opening and sustaining lines of communication among key stakeholders in their regions.

Key to the Massachusetts system of school to work transition, the Education Reform Act empowered REBs as the vehicle for planning and developing school to work transition on a regional basis. The ERA provides:

Section 98. Each Regional Employment Board . . . shall work with comprehensive high schools and regional vocational-technical schools in its region to develop a plan to provide transition for students into the workforce. Such plan shall be incorporated into an annual report from the school district to the Regional Employment Board. Each Regional Employment Board shall submit a workforce development strategic plan annually to the MassJobs Council. This plan shall include a comprehensive school to work transition policy for its region.

While the specific design and delivery structures for school to work programs are likely to vary from region to region — and among different communities within a region — Regional Employment Boards will serve as forums to engage key stakeholders in developing a consensus on:

- ◆ identifying all programs offered by secondary and postsecondary educational institutions in their regions that provide structured career pathways for youth;
- ◆ identifying all services available that prepare at-risk and out-of-school youth for the world of work;
- ◆ identifying the number and types of firms that currently employ, or are willing to employ, high school-age youth in their regions;
- ◆ using the knowledge base built up by the community colleges — regionally-based entities that are experienced in school to work strategies;
- ◆ identifying industries that could create comprehensive work-based learning programs;
- ◆ working with key regional business organizations to designate an entity to provide career services and other 'connecting activities' that connect high-school age youth and local businesses at a significant scale;
- ◆ identify all services available that prepare students with disabilities for the world of work;
- ◆ providing ways and means for teachers to be exposed to business and industry to assist them in bring in more workforce relevance to classroom exploration;
- ◆ monitoring the progress and evaluating the outcomes of various school to work efforts taking place in their regions; and
- ◆ using all of this information to develop and refine a strategic plan for school to work programs in their regions.

Action Plan for Implementing a Statewide System of School to Work Transition in Massachusetts

Blueprint for Statewide Systems Tasks

1.0 System Governance

Goal: Build a system of governance at the state, regional, and local levels that is broadly inclusive of all partners, defines meaningful roles and responsibilities, and provides direct opportunities to obtain the active collaboration and continued involvement of employers and other key parties.

Context. The implementation of a comprehensive school to work system will depend on the efforts and participation of a wide variety of existing education and economic institutions and programs. In order to ensure that representatives of all key stakeholders have the opportunity to participate in planning, implementation and evaluation, three additional structures will be formed. These structures will mobilize the leadership, participation and community resources throughout the Commonwealth.

- ❖ *Task 1.1: Designate a School to Work Committee as a standing committee of the MassJobs Council for purposes of state-level policy development and coordination, ensuring that the school to work transition system is part of a broader system of workforce development.* A School to Work Committee will be created as a permanent committee of the MassJobs Council to ensure that the school to work system is part of the broader employment and training system in the state. The School to Work Committee, which will be established by executive order, will be comprised of cabinet secretaries, representatives of state agencies, local officials, and representatives of key business, community-based and other private-sector organizations. It is expected that individual members will provide leadership and coordination within the sector they represent.

The co-chairs of the School to Work Committee will be the Secretary of Education and a member of the MassJobs Council that represents the private sector. To guide the agenda and work of the group, an executive committee will be established consisting of the two co-chairs, the

Commissioner of Education, the Commissioner of the Department of Employment and Training, a community college president, a union representative, a representative of a community-based organization, and a representative of a statewide business association.

The Committee represents the continued collaboration of stakeholders in the development, refinement, and implementation of our system over time. Oversight by the Committee assures the active and continued involvement of parties.

The School to Work Committee will be charged with several policy, oversight and coordination responsibilities including:

- ❖ coordination of state-level planning, development and implementation activities;
- ❖ establishment of performance standards for local programs, which will be designed to assure that each local program complies with all program elements and safeguards set forth in the STWOA;
- ❖ establishment of statewide system benchmarks through a broad process involving the legislature, state agencies, the private sector, schools, community colleges, Regional Employment Boards and others;
- ❖ review of REB strategic plans for school to work programs, activities and information campaigns;
- ❖ evaluation of progress toward Regional Employment Boards' goals, achievement of benchmarks and compliance with timetables;
- ❖ development of uniform performance measures to provide consistent statewide accountability;
- ❖ development of a statewide marketing and information dissemination plan in coordination with local and regional efforts;
- ❖ capacity-building for Regional Employment Boards and school districts about effective strategies and programs;
- ❖ identifying and integrating state, local, private sector, and federal funding;
- ❖ coordination of state budget requests for school to work initiatives, recommendations for reallocation of state and federal funds and plans for federal waiver requests;
- ❖ assuring that the statewide school to work system will be properly supported by continued funding over the long term, especially as STWOA funds expire (our strategies here include: (a) assuring that local partnerships spend federal subgrants to

support program-building and capacity-building activities rather than use funds for recurring administrative or operational costs; (b) build a base of experience, informed by local partnerships, of how waivers of a range of related federal categorical programs can be used to fund STWOA activities; and (c) coordinate additional funding available to school districts as increased local aid under the Education Reform Act);

- ◆ assuring the accessibility of school to work programs for all individuals;
 - ◆ reporting to the Governor on the status of all aspects of the state's school to work initiative and developing further recommendations to resolve statewide issues and barriers; and
 - ◆ coordination of responses to federal evaluation and audit activities related to school to work.
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- ◆ **Task 1.2: Empower a unit of professionals at the state level to staff the STW Committee, develop products and direct activities for which they are responsible, and coordinate with staff from partner agencies.** The Committee will be staffed by a small unit of professionals that will be created for the purposes of accomplishing Committee functions. At present, Massachusetts anticipates that a maximum of four positions will be created in this unit to carry out direct activities, coordinate with other operating agencies, and monitor development and implementation of school to work transition generally.
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- ◆ **Task 1.3: Develop an inter-agency working group comprised of representatives from partner agencies.** Committee staff will be assisted by an ongoing, inter-agency working group of staff comprised of representatives of operating agencies and secretariats within the Commonwealth, including the Department of Education, the community colleges, the Department of Employment and Training, Bay State Skills Corporation, the Executive Office of Education, Massachusetts Rehabilitation Commission, the State Council for Vocational Education, the Higher Education Coordinating Council, and others.
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- ◆ **Task 1.4: Use the MassJobs Council as a coordinating mechanism that links school to work with the broader employment and training system for the Commonwealth.** The MassJobs Council (MJC) will continue to serve as the state's super council to coordinate all training and employment efforts in the Commonwealth. MJC co-chair, Lieutenant Governor A.

Paul Cellucci, has committed his active participation in system implementation, assuring the direct involvement of the governor's office in activities undertaken through MJC and its School to Work Committee. The School to Work Committee, as a standing committee of the MJC, will provide a formal linkage between school to work and employment and training systems across the state. In its ongoing efforts to coordinate and improve the workforce development systems, MJC will:

- ❖ make recommendations to the Governor concerning school to work policy; and
 - ❖ ensure that school to work activities are coordinated with on-going efforts to improve the workforce development system.
- ❖ **Task 1.5: Use Regional Employment Boards for planning, marketing, convening, and coordinating school to work activities on a regional level.** The general role of Regional Employment Boards was outlined above. In summary, REBs are responsible for:
- generating annual plans that identify both the current and emerging industry clusters in their region;
 - convening a School to Work Committee that will develop strategic plans for school to work initiatives in their region;
 - ensuring that the skills developed by youth through their school to work activities are those required by the types of industry clusters in the region;
 - developing and implementing a marketing and information campaign to private industry in the region; and
 - assuring the active and continued participation of local officials, secondary and postsecondary education institutions, business associations, organized labor, teachers, students, parents, community-based organizations, vocational student groups, language minority association, and local vocational education agencies in school to work planning and promotion.
- ❖ **Task 1.6: Create regional school to work committees to assist in coordination, program development, planning and implementation.** Each Regional Employment Board has already created, as a requirement of receiving STWOA planning funds for conducting their STW program inventories, a regional school to work committee. Membership will be drawn primarily from representatives of each local partnerships that operates a School to Work Opportunities

program within the region, and will include businesses, schools, parents, community colleges, labor organizations, and community-based organizations. The responsibilities of the regional school to work committees include:

- ❖ development of strategic plans that reflect both the capacity of the Regional Employment Boards and school districts, specific industry clusters, and the foundation of current school to work programs in their areas;
 - ❖ monitoring progress towards goals and reporting to the MJC School to Work Committee;
 - ❖ coordination of regional and local marketing and public relations campaigns;
 - ❖ convening local partnerships in those areas where they have not developed naturally; and
 - ❖ evaluation of local school to work programs and incorporation of continuous improvement activities into plans.
- ❖ **Task 1.7: Encourage the development of local partnerships at the community level to design and operate STWOA programs.** Local partnerships will be responsible for designing, implementing, and operating School To Work Opportunities programs. Local partnerships will be encouraged to form at the 'community' level — with community to be self-defined by participants, which allows the partnerships to be formed according to natural labor markets. For most communities, this will be at the school district level. Local partnerships will be required to include representation from local school systems, postsecondary institutions, community-based organizations, employers, students, parents, service providers and local area offices of state agencies, labor organizations or nonmanagerial employee representatives, the non-profit sector, parent organizations, and teachers. The local partnerships are responsible for:
- ❖ ensuring that school to work activities are designed and delivered to meet the needs of both students and employers;
 - ❖ recruitment and expansion of programs to additional schools and employers;
 - ❖ informing all students about opportunities to participate in the school to work system;
 - ❖ developing an integrated operating budget for School to Work Opportunities programs that reflects contributions and support from all members of the partnership;

- ◆ assuring that each element of the STWOA has been considered and addressed in the operation of a local program — in-school activities, at-work activities, at-risk activities, connecting activities, and measurements;
 - ◆ assuring full access by all students who seek to participate in a local program, including focused attention on the special needs of at-risk and out-of-school youth, students with disabilities, and assuring equitable representation of young women and minorities in nontraditional programs;
 - ◆ managing local public relations campaign to inform the community about current school to work programs and to recruit more participants;
 - ◆ recognizing those people who provide leadership and support to school to work activities;
 - ◆ reporting to regional school to work committees on the local efforts towards achieving the benchmark performance measurements; and
 - ◆ identifying issues and barriers that inhibit the expansion of the school to work system to scale.
- ◆ **Task 1.8: Establish the Executive Office of Education as the fiscal agent for the School to Work Opportunities Implementation grant.** The Executive Office of Education was created in 1992 to act as the lead agency on behalf of the administration's education agenda. While EoE has few statutory mandates, its central position in the education system gives it the opportunity to coordinate the efforts of the various education agencies, and to build constituencies both inside and outside of government that are necessary to enact reform at all levels of education — K-12, adult literacy, technical training, and higher education.

Through the Secretary of Education's participation on governing boards for primary, secondary, and higher education, EoE is able to fashion a direct and comprehensive education agenda. It acts as the bridge between different educational sectors to develop, direct, and coordinate a comprehensive educational policy in the Commonwealth. The Secretary is a member of the state's board of education and MJC, and will be the co-chair of the MJC Committee on School to Work Transition. EoE is active in assisting the Governor fill vacancies on various educational boards of trustees, including the constitutional Board of Education (BoE), which appoints a Commissioner to direct the efforts of the Department of Education (DoE).

2.0 Getting to Scale Through Education Reform

Goal: Implement the changes called for in the 1993 Education Reform Act to support the growth of a statewide system of school to work transition. Work with the Secretary of Education, Board of Education, Commissioner of Education, and Department of Education in carrying out their responsibilities under the Education Reform Act, ensuring that the school to work system is a part of the broader system of secondary and postsecondary education in the state.

Context. As outlined in earlier sections of this proposal, the Education Reform Act of 1993 is a critical tool for mobilizing all schools around the school to work objectives and achieving a statewide system.

Key elements of the ERA that affect implementation of the Massachusetts school to work system are:

- ❖ *Task 2.1: Elimination of the general educational track.* By June 1994, all high schools will submit plans to eliminate the general educational track. Schools, especially comprehensive high schools, will be encouraged to replace the general track with a series of pathways organized around thematic majors or career choices. These paths will offer students a variety of ways to integrate school-based learning with work-based learning, community service, internships and apprenticeships. Schools, community colleges, and REBs will work together to link the development of school-specific strategies with the organizing of industries on a regional basis in order to create pathways that contain school-based and work-based learning under the guidelines of the STWOA.
- ❖ *Task 2.2: Common Core of Learning.* The Common Core of Learning will be published and formally approved by July 1994. Elements of the draft Common Core of Learning support the broad goals contained within both the School to Work Opportunities Act and the Goals 2000: Educate America Act. Selected draft goals call for universal attention to career exploration, preparation for work, achievement to a high academic standard. The Common Core provides a broad framework that will be advanced through the development of curriculum frameworks and specific strategies at the schools and community level.
- ❖ *Task 2.3: Link the development of statewide subject-matter curriculum frameworks to work-based competencies.* K-12 science and math frameworks will be published by the summer of 1994. Other subjects will be prepared by January 1995. Statewide curriculum frameworks in Massachusetts have been supported by the Statewide Systemic Initiative (SSI) Project, an initiative funded by the National Science Foundation. At the upper secondary level, these

frameworks will reflect specific knowledge that students need for workplace success. By agreement with the DoE, all frameworks will address school to work as well as community service systems.

- ❖ **Task 2.4: Develop standards for the 10th grade 'competency determination'.** Standards for this certificate will be developed by January 1995. Students in third, fifth, eighth, and tenth grade years will undergo a comprehensive assessment of academic skills. In our ultimate vision, we see this final assessment as a systems gateway — successful assessment at the tenth grade level will enable students to enter a career pathway or thematic 'major'. This way, the education system will be directed toward helping students attain mastery of basic skills after which students will select from a broad range of school-based and integrated school/work experiences.
- ❖ **Task 2.5: Develop the Certificate of Occupational Proficiency (COP).** A COP will express a skills standard that may be reached at comprehensive schools, vocational schools and community colleges. All students will have the option to earn one. Under the Education Reform Act, the Board of Education is required to develop standards for the COP by 1995. This credential will be designed as our portable, industry-recognized credential that certifies a student has mastered skills that are benchmarked to a high quality standard. The implementation process for the COP will be designed to assure that it meets not only the standard expressed in the Education Reform Act but in the STWOA as well.

The fifteen community colleges will be active in offering both COPs and Certificates of Advanced Mastery for students who have enrolled at a community college but not yet attained these credentials. The community colleges have agreed to form their own implementation task force to determine specific program adjustments and workable mechanisms for the award of COP through the community colleges.

- ❖ **Task 2.6: Develop the Certificate of Advanced Mastery (CAM).** A CAM will be developed to represent an advanced academic certificate obtainable by students in all occupational pathways or career majors. CAMs will be available at comprehensive schools, vocational schools and community colleges. The process of development of the CAM will be linked with the Goals 2000 process.

- ❖ **Task 2.7: Develop the Student Assessment System.** Development of 'authentic gauges of performance' that test subject matter knowledge will factor in multi-disciplinary, project-based team teaching that lies at the heart of school to work program delivery.
- ❖ **Task 2.8: Develop recommendations through the Time and Learning plan to accommodate integrated school and work learning programs.** The ERA requires DoE to prepare a state plan for 'Time and Learning' — to recommend changes in the school year or school day. The plan will be developed to consider flexibility needed to accommodate integrated school and work-based learning programs.

3.0 Standards and Assessment

Goal: *Develop a statewide system that is based on the highest standards, and that measures the long-term labor market and education outcomes of students.*

Context. Industry-designed and approved skill standards play an important role in shaping the learning that takes place in schools and on the job in the Massachusetts school to work system.

- ❖ **Task 3.1: Develop industry-based skill standards for integrated school and work programs.** Massachusetts will develop a system of industry-specific skill standards to define the intended outcomes of our school to work programs; lay the foundation for the design of education standards, frameworks, program certification and program approvals; and provide a bond linking diverse education and economic development initiatives in the state.

Over the next five years, Massachusetts will develop voluntary skill standards for nine to twelve training occupations that represent broad industry clusters comprised of critical and emerging industries. The sequence of standard development will reflect the programs selected as the initial STWO programs in the state, based on a competitive grant process. The training occupations will be defined by the duties/tasks/skills/attributes needed for success of workers entering these industry clusters. The standards derived from this work would link schools which interest and prepare young people for careers with workplaces in which their careers thrive. Because the 'standards' represent the skills actually needed and used by workers in industry, they will not only structure curriculum at the community college level but also will require the articulation of curriculum between high schools and community colleges (2+2); and between community colleges and four-year universities (2+2+4).

Massachusetts standards will be developed and approved on a statewide basis by the board of education, under its authority as established in the Education Reform Act. The process will convene industry-specific working committees, which will review and consider (a) standards already in use in existing school and work learning programs (e.g., standards used in national demonstration programs); (b) standards developed for STWOA programs by other states; (c) standards as developed by current national demonstration grants for ten industry sectors; (d) standards as eventually developed by the National Skills Standards Board established by the Goals 2000: Educate America Act; and (e) selected translations of industry standards used by national youth training systems in competitor nations such as Germany, Denmark and Sweden. In all cases, standards will be developed to reflect the needs of 'high performance' employers — those for whom work organization technology depend on having a workforce whose high skills represent a competitive advantage. They will be designed to assure high mobility across related occupations. Member firms from the Governor's Council on Economic Growth and Technology have agreed to provide industry leadership.

Parallel activities at the regional and local levels will implement each standard by coordinating development of curriculum frameworks, integrating academic curriculum, and structuring work-based learning within participating employers.

- ❖ **Task 3.2: Develop a system of work-based skills assessment.** Assessment is the process of measuring a student's progress — work performance at an acceptable level, responding appropriately when things go wrong, and transferring skills and knowledge to new situations. Assessment standards play an important role in achieving an effective statewide system of competency-based training and credentialing.

Massachusetts will develop a system of workplace, performance-based assessment that operates on the following essential principles:

- An assessment will cover the full range of skills and knowledge a learner needs to demonstrate competency. The assessment will specifically measure attributes of 'high performance work organizations' (being an effective member of a group, problem-solving, critical thinking, broad analytical and systems thinking). It will test a student's capacity to learn new skills quickly.
- Assessment in a competency-based approach will be criterion referenced — it will measure a person's performance or achievement in relation to criteria and not in relation to the performance of other learners.

- Assessment will measure the practical application of knowledge and skills — since the system is intended to measure *performance*, an assessment will use procedures that in fact measure it.
- An assessment will draw from evidence gathered on a number of occasions and in a variety of contexts or situations — the ability of a learner to apply knowledge and skills in new and different situations usually cannot be inferred when performance has taken place once in a single context.
- Competency will be demonstrated under conditions as close as possible to those under which the competency will normally be practiced — in the normal work environment.
- A system of assessment will allow learners to demonstrate mastery in different ways, including observation, demonstration and questioning, pen and paper tests, oral tests, projects, simulations and role playing, and portfolios (e.g., work samples).
- An assessment will include process and design management issues along with subject matter tasks — e.g., it will assess the use of teamwork in the planning and performance of a science experiment.

Specific sub-tasks in creating a system for worksite assessment will include:

- (a) Establishment of a 'skills credential' that is strictly competency-based, and may be achieved by a student whenever he/she demonstrates performance to the broad standard;
- (b) Making the assessment system employer-based — within employer associations, statewide trade associations, or professional/employee associations;
- (c) Use of a portfolio-based demonstration of mastery; and
- (d) Support for developing a professional network of assessors in order to have uniform critiques of students and work products.

4.0 Accountability

Goal: *Establish a statewide system that organizes information that supports evaluation and measurement of student, program and system performance.*

Context: Measurement and accountability is critical, especially to a decentralized system of legally and organizationally independent stakeholders. The School to Work Task Force process has led to agreements by all stakeholders to hold ourselves accountable in involving employers, schools and

community colleges, and in matching student needs with employer demand. By measuring and keeping track of academic accomplishment, worksite experiences, and the increasing numbers of students who have positive outcomes, we will assure a true system.

❖ *Task 4.1: Implement a system that tracks the long-term labor market experiences of school to work students: The Placement Accountability System.* Massachusetts plans to implement a system to use quarterly wage record reports generated from their unemployment insurance systems as a tool to help evaluate the employment and earnings impact of different workforce development programs. The following summarizes key steps that have been taken to date to lay the groundwork for establishing a Placement Accountability System (PAS) in Massachusetts:

- In 1992, the MJC worked with members of the state legislature to pass a new enabling law authorizing the matching of data bases necessary to achieve a PAS. Data gathered as part of the unemployment insurance wage reporting system may be used for the purposes of evaluating the employment and earnings outcomes of programs.
- In 1993, the MJC initiated a successful demonstration pilot and launched a comprehensive feasibility study for creating a total PAS. The study, done by the Massachusetts Institute of Social and Economic Research (MISER), supports the feasibility of cross-matching data on roughly 100,000 student/trainee completers per year of different education and training programs with the wage record data base, which covers more than 95 percent of total employers in the Commonwealth.

Specific ways that this data base will be used to further the development of the Massachusetts school to work system include:

- providing "real time" interactive information about occupational supply and demand of newly trained young workers;
- evaluating the net employment and earnings impact of different types of services provided to participants in the Massachusetts school to work system;
- allowing educational policymakers to monitor the effectiveness of secondary school systems in placing students into higher education institutions, and even the impact on students' academic achievement of work reformed while they are in school on their academic achievements;
- assisting school to work practitioners to identify firms, occupations, and industry areas that would be most likely to provide work-based learning opportunities to students; and

- continue to make information available to parents and student through the Parent Information Center — a system to address the informational needs of Massachusetts citizens about education in the Commonwealth (e.g., school district profiles for the 1,800 public schools, profiles of vocational schools, regional economic profiles, and a toll-free request line).
- ❖ **Task 4.2: Implement the MASS Ed On-Line network.** MASS Ed On-Line is the electronic network by which local districts and other entities will receive information from the PAS>
- ❖ **Task 4.3: Carefully document program costs of STWO programs in order to refine state budget requests, the use of federal categorical programs, and the use of federal STWOA grant funds.** No state has developed accurate, reliable information about the cost of operating integrated school and work programs over time. This application for an implementation grant contains no request for federal program waivers — a section of the Act that may ultimately prove of greater financial significance than receiving an implementation grant. This has been a purposeful omission; it hinges on our unwillingness to project system costs in the future with no basis of information.

Massachusetts will request of every local partnership that develops a STWO program specific documentation of budget and funding requirements, and will further request each local program to identify specific federal categorical programs that would be useful in creating an integrated program budget for local partnerships.
- ❖ **Task 4.3: Review the submission of REB annual plans for regional school to work systems.** Each REB is required by law to prepare and file an annual school to work plan with the MJC. The Committee will actively review each plan to develop appropriate policy responses and refine annual implementation plans — to assure continuous improvement of the system and adjust implementation strategies based on the changing demands of system users.

5.0 Program and System Evaluation

Goal: Establish a system that conducts regular, periodic evaluations of process, program design, and student outcomes.

Context. Evaluation is a critical component in the development of a comprehensive statewide system. Evaluation will be accomplished to serve a variety of goals: (a) a process or formative evaluation of local partnerships helps assess whether a program design meets the stated goals and objectives; process evaluation is a useful method of documenting the means by which a local partnership arrived at a program design — and thus offers a useful road map for the planning process that will take place in Regional Employment Boards and local partnerships in coming years; (b) programs need to be measured to assure that an integrated school and work learning program actually leads to a positive outcome in the education or labor market experiences of students; and (c) evaluation of the system reveals whether the interim or long-term goals of a statewide system have been reached. The following specific evaluation steps are part of the implementation of the Massachusetts system:

❖ *Task 5.1: Implement a system of peer review and assessment of program design.*

Massachusetts has designed an innovative form of process evaluation that involves both self-assessment and peer review as primary means of directly sharing design and program experiences with practitioners across the state. Under this approach: (a) the state prepares a 'self-assessment manual' for local partnerships that asks a comprehensive series of questions regarding the design and operation of local school to work programs; (b) a local partnership conducts a periodic self-assessment using the manual — perhaps one year into the implementation of an operating program; (c) the state designates a peer review team, comprised of school to work practitioners from other programs in the state, which conducts an on-site visit and reviews the completed assessment; (d) the on-site review team prepares a brief report making recommendations to strengthen a school to work program; and (e) both the self-assessment and the on-site report are distributed to REBs via on-line network in order to disseminate this knowledge widely across the state.

This process of self-assessment and peer review has several clear advantages. First, it directly links practitioners with each other to share knowledge and experience with school to work programming. Second, it uses the resources of the state in limited and appropriate ways, eliminating the need to develop and organize technical assistance and program development using state staff. Third, it forces local partnerships to take time for reflection and improvement regarding program quality.

- ❖ **Task 5.2: Develop common data collection requirements for all local programs that permit comparable student outcome evaluation.** The STW Committee will prepare a sample evaluation protocol for an outcomes evaluation of local programs. Staff will establish a data collection requirement listing comprehensive data requirements — data including age, gender, ethnicity, academic achievement level, disability, degree of English proficiency, socioeconomic background, etc. Data requirements will be forwarded to each participating local partnership, which will be responsible for profiling every participating student.
- ❖ **Task 5.3: Design a common program evaluation approach for consideration by local partnerships.** The STW Committee will prepare a sample evaluation protocol for a process evaluation of local programs. The protocol will be made available through the REBs to each local partnership in order to encourage comparable evaluations of programs. Products of all process or formative evaluations will be made available to each REB in the state either by hard copy or through the on-line electronic network.
- ❖ **Task 5.4: Conduct long-term evaluations based on the labor market and higher educational outcomes of students.** The STW Committee, in conjunction with the Department of Employment and Training, will develop methods of linking local program evaluation to the PAS/UI wage record tracking system in order to generate long-term post-program outcome data on student graduates. The STW Committee, in conjunction with the Higher Education Coordinating Council (HECC), will provide for a system of data collection that documents student enrollments in community colleges and public institutions of higher education.
- ❖ **Task 5.5: Create a state reserve fund to assist in a common evaluation process.** The STW Committee will reserve funds for grants to local programs to conduct independent process, formative, and outcomes evaluations. All programs receiving planning or implementation grants from the state for STWOA activities will be required to conduct some form of evaluation.
- ❖ **Task 5.6: Establish statewide system benchmarks.** On a systems level, one of the first acts of the STW Committee will be to establish system benchmarks that establish objective performance measures and interim guidelines for system development. These benchmarks may include such measures as:

- percent of high school students enrolled in STWOA programs;
- percent of 10th graders mastering basic skills assessment;
- percent of students receiving skill credential;
- employment rates and employment/population ratios by race;
- enrollments and retention in higher education, by race;
- average wage at age 25 compared to peer cohort;
- percentage of disabled students moving to jobs;
- percent of all employers providing structured work-based learning; and
- equity of participation by gender, ethnicity, and other characteristics.

6.0 Technical Assistance

Goal: Build a knowledge base of effective school to work transition models, including strategies that meet the needs of all youth. Develop technical assistance that builds the capacity of employers, schools, local partnerships, and REBs to meet their obligations under a statewide system. Use specific technical assistance grants to demonstrate experiences of collaboration and program operation.

Context. One of the initial tasks the state will face in implementing a system of school to work transition is the development of a technical assistance strategy for program design and delivery. The Massachusetts strategy is defined by three essential qualities: first, very little information will need to flow 'top down' from the state to local programs, since the experts in this system will be practitioners at local sites; second, we recognize the need for technical assistance to support the creation of mechanisms to share information and experience about programs; and third, technical assistance will be directed towards building the capacity of local and regional partners to organize, convene, plan, design, and operate STWOA programs. Technical assistance will take several forms. These include:

- ❖ continued provision of technical assistance to REBs to build capacity and understanding about school to work transition and the role they will play in convening, facilitating, planning, and evaluating the efforts of local partnerships;
- ❖ the preparation of guides and manuals, based on experience with existing programs, related to such topics as: (a) program design; (b) methods of integrating curriculum (academic and technical; school and work); (c) how to construct work-based learning; (d) program evaluation;

(e) continuous improvement of program quality; (f) linking youth work-based learning to adult training; (g) funding coordination; and (h) connecting activities;

- ❖ organizing the self-assessment and peer review process outlined above;
- ❖ resource guides specifically prepared for schools regarding features of the Education Reform Act, such as eliminating the general track (a publication scheduled for delivery by DoE in May 1994); integration of curriculum; professional development and teacher recertification; assessment; and other topics; and
- ❖ developing specific mechanisms that draw on program experience and demonstrate methods of designing workable relationships, integrating school with work, providing authentic skill assessments, etc.

For as many technical assistance activities as possible, Massachusetts will pursue integrated training that 'models the model.' That is, technical assistance itself will be learner-focused, requiring active and experiential learning, and integrating school-based, work-based, and connecting activities. It is important for all participating professionals to have the opportunity to work through design issues in the same manner as we are expecting students to experience school and work.

Several specific implementation steps have already been initiated to support REBs in meeting their school to work responsibilities. These steps represent the initial efforts of on-going activities that are part of the Commonwealth's comprehensive implementation:

- ❖ **Task 6.1: Continue efforts to convene annual REB Roundtables for School to Work Transition.** The School to Work Task Force teamed with REBs to convene regional roundtable discussions regarding school to work transition throughout the state. Task Force members and staff participated by providing a briefing on the issues of school to work transition and the proposed federal initiative under the STWOA as well as soliciting views on related issues. These discussions: (a) provided invaluable input to the Task Force recommendations; (b) provided an opportunity to brief community leaders on the STWOA; (c) promoted the REB role as conveners for school to work issues; (d) and helped foster connections and agreements between local partners to begin planning and designing actual programs.

REBs will convene annual regional roundtables as a way of continuing expansion and marketing of school to work within the region; sharing information about program experiences; soliciting general input from schools, employers, community colleges, community organizations, and others; and assisting in the development of an annual plan for school to work transition.

◆ **Task 6.2: Technical Assistance and Capacity-Building for Regional Employment Boards.**

The MassJobs Council contracted with Bay State Skills Corporation (BSSC), a quasi-governmental non-profit corporation that provides broker and demonstration services in training and employment within Massachusetts, to provide technical assistance to Regional Employment Boards in the area of school to work transition. BSSC, through discussions with the Regional Employment Board Chairs Association, has developed a two-part strategy. First, it is in the process of creating an on-line interactive computer network through which Regional Employment Board staff and others may share information and experiences on school to work planning and programs. BSSC will administer the network to assure its quality and promote active use. Second, BSSC is preparing *Chronicle*, a loose-leaf information book that will contain periodic information about school to work transition: articles, summaries of policy documents, notifications, program profiles, evaluation studies, etc.

We will concentrate a great deal of initial technical assistance content on disseminating the experience of the Boston PIC in school to work transition, especially in providing 'connecting activities.' The Boston PIC has been at the center of planning, coordinating, and connecting school to work activities within Boston. In the next years, much of this developed base of knowledge and experience will help inform REB action across the state. The Boston PIC serves as the convener of all the key players in Boston to focus on school to work issues. The PIC is seen as providing the mechanism for collaborative action, giving the Boston School Committee, the Boston Public Schools, community colleges, and the business community a vehicle for collective action. The PIC has primary responsibility for organizing employer participation — a continuation of the role it has played for over a decade in the Summer Jobs Program and the Jobs Collaborative and, more recently, in the Career Academies and in ProTech. Under the STWOA, the Regional Employment Board will further define and expand its approach by organizing employer involvement by industry clusters and creating a more systematic approach to connecting employers and program operators.

◆ **Task 6.3: Continue the school to work program inventory to document existing school to work transition programming.** One important strategy to help the Commonwealth reach scale with a true statewide system relates to how it will encourage existing programs to adopt the STWOA program model. Building on, or converting, existing programs works only if we know what really exists across the state. The Commonwealth has initiated an inventory of school to work programs using three methods: (a) Last summer, the School to Work Task Force requested information about existing programs for consideration as a part of the Task Force process. State

agencies, community colleges, REBs, and school districts all provided information for review by the Task Force. (b) The Commissioner of Education delivered a survey to all school districts to document every existing school to work program in the state. The results of the survey are being compiled and analyzed by DoE staff. (c) Each of the 16 REBs will receive a small grant, derived from STWOA planning grant funds, to conduct a further review and documentation of school to work programming. All of these profiles will be included on the BSSC on-line network. The process of collection will help every Regional Employment Board better understand existing programs and program partnerships that already exist within its region.

- ❖ *Task 6.4: Use the network of regional School to Work Committees as a dissemination avenue for publications and products.* REBs have already created, as a requirement of receiving STWOA planning funds for conducting their STW program inventories, a regional school to work committee. Membership will be drawn primarily from representatives of each local partnership operating a School to Work Opportunities program within the region.
- ❖ *Task 6.5: Create a School to Work Institute to convene system partners on an annual basis to celebrate success, address barriers, share experiences, transfer knowledge, build a wider base of practitioners, and promote system growth over time.* The Commonwealth will organize a School to Work Institute — a learning opportunity that will invite all system partners, stakeholders, and practitioners to learn from each other and participate directly in discussions for refinements and reconfigurations of the system. We envision a regular, annual convening of 500 - 1,000 teachers, mentors, parents, administrators, policymakers, and other system partners representing stakeholders at all levels. The Institute would be constructed to:
 - allow all participants to hear a common message regarding school to work transition efforts, meaning, and future development;
 - provide structured opportunities to share information and experiences about the nuts and bolts of program operation directly from the places where it is happening;
 - give local partners an opportunity for direct input into state-level system planning and finance;
 - strengthen working partnerships;
 - disseminate information and transfer knowledge about new techniques;
 - communicate next steps and strategies for system expansion in the coming year; and

- monitor progress toward achieving system benchmarks.

❖ *Task 6.6: Implement a strategy of building model programs, complete with dissemination activities that share knowledge and experience from initial integration efforts.*

In Massachusetts, we are in the process of developing model programs, in collaboration with local practitioners, for replacing the general educational track with integrated academic and technical learning, integration of school and work opportunities and experiences, and integrated secondary and postsecondary education. For in-school, in-firm, at-risk, and connecting activities we will develop explicit urban, suburban, rural, and regional collaboration models. Each of the models, in partnership with regional and statewide support, will develop explicit, publishable products that details the model effort. Each project will have a detailed dissemination strategy — a methodology to distribute products and documented experiences rapidly among all practitioners in the state.

7.0 Professional and Curriculum Development

Goal: To assure that teaching and counseling professionals, with supporting curriculum products, are available to provide appropriate instruction in a school to work system — that appropriately integrate academic and technical education, school and work learning, and engage students in active, applied, hands-on learning.

Context. Because of the unique concurrence of Education Reform, the development of academic curriculum frameworks, and a new focus on school to work transition, Massachusetts will be placing a strong emphasis on new strategies for professional development of teachers, counselors, and other school-based professionals. The issue of professional development extends beyond training in 'integrated and applied' curriculum (although that is one critical component). The ERA calls for a new system of teacher and professional certification and alternative certification designed to encourage a wide range of expertise to be marshaled together in the schools in support of student learning. Schools are now required to develop and file annual professional development plans that commit funds for professional development to specific goals at the school level. New curriculum frameworks, new standards for student performance (including the periodic assessments, the competency determination, the COP, and the CAM), and action to replace the general educational track with technical and professional thematic majors, will all generate a response within the schools for new approaches to teaching and learning — driving change in professional development and licensure.

Massachusetts has established its initial approach to professional development (see *FY94 Statewide Plan for Professional Development*, which appears in Appendix Six). The Plan sets forth four priority goals for DoE: (a) work with the education community to establish professional development priorities; (b) help school districts prepare professional development plans; (c) link professional development and recertification; and (d) link schools and teachers with higher education and other resources for professional development.

The State has made a commitment that at least 15 percent of all Carl Perkins funds must be directed toward professional development and curriculum integration. The Department's efforts will focus on encouraging schools, teachers, and school-level professional development plans are based on the following principles and approaches:

- ❖ Encourage teachers, counselors and instructors, both in Massachusetts and from across the nation, who are already involved in school to work programs to act as presenters, trainers, and guides at regional and local demonstrations.
- ❖ Use the framework of school to work transition as a bridge to accomplish the integration of academic and technical or vocational studies through linking school and work learning.
- ❖ Encourage schools to provide teacher release time to serve internships in the private sector, with the expectation that they will develop work-related and contextual instructional examples for specific curriculum products.
- ❖ Specifically link academic subject curriculum frameworks and related professional development to school to work transition — especially at the upper secondary level.
- ❖ Above all, involve users — teachers and employers — directly in the professional and curriculum development process to build ownership and keep expertise at the delivery level.
- ❖ Since the process of implementing a integrated school to work curriculum has no clear beginning or end, focus on the development of 'modular' materials by instructional staff — modules that can replace existing curriculum for ease of infusion into existing courses.
- ❖ Design and develop specific workplace readiness and workplace awareness modules by classroom teachers.
- ❖ Each school and instructor must take careful steps to review existing curriculum to assure that instruction takes place in 'all aspects of an industry'. DoE will identify expert resources that can address the planning, finance, and management elements of an 'all aspects' curriculum, which tend to be the most commonly missing elements.

- ❖ Teachers will be encouraged to develop project-based activities and innovative student-teacher 'contractual tasks.' Under this approach, students (working in teams) negotiate with teachers to define specific projects that have clear learning content. While many schools have developed some experience with student-centered projects, we have found that many projects lack real learning content, and teachers haven't been clear on how to sharpen academic goals contained within the project as defined. Under the negotiated project approach, students and teachers clearly define explicit learning goals that relate the tasks to competencies in language, math, science, and other academic subject areas.
- ❖ Develop technical committees at the regional level, comprised of employers, associations, and organized labor (as appropriate) to guide applications of national and state skills standards to curriculum design and development.
- ❖ Pilot test new curriculum materials using technical assistance support of higher education institutions to permit rapid dissemination to other schools as well as institutionalizing new curriculum approaches within the teacher education schools in the state (e.g., the Center for Teaching and Learning and the University of Massachusetts).
- ❖ Create interdisciplinary teams at the school building level who would be responsible for learning new approaches to curriculum, instructional presentation, integration. Teams would be comprised of academic and technical instructors as well as key administrators. These teams would be responsible for developing expertise in school to work transition, integrating curriculum, working with employers and mentors, and other lead activities. Teams would then become in-school resources to encourage the rapid expansion of knowledge to other staff within the school building.

8.0 Links to Higher Education

Goal: *Assure that the Commonwealth's school to work system ensures access to higher education and further learning.*

Context. The Secretary of Education, a co-chair of the School to Work Task Force, has requested the Committee on Education Policy to consider a variety of proposals directed toward supporting the linkages between School to Work Opportunities programs and higher education in the Commonwealth. The Committee on Education Policy is a coordinating committee consisting of the executive committees of the Board of Education and the Higher Education Coordinating Council. The Committee is staffed by the Executive Office of Education.

The Committee will be asked to develop specific initiatives on the following elements of systemic change:

- ❖ **Task 8.1: Articulation.** Clarify policy on secondary/postsecondary articulation in order to remove as many barriers as possible to creating formal links, with statewide recognition, between STWOA programs and community colleges and institutions of higher education. The state's community colleges have taken the lead in convening school districts into working sessions that address articulation at a systemwide and regional perspective.
- ❖ **Task 8.2: Dual enrollment, advanced placement, and uniform tuition.** This effort will also establish a policy on dual enrollment, advanced placement, and the award of transcribed credit for courses taken by a student that have postsecondary content while the student is still enrolled in high school. In addition, the effort will establish a uniform tuition charge for high school students enrolled in postsecondary courses as a part of a dual enrollment program; and

9.0 Local Program Development

Goal: Assure the development of a wide array of local school to work programs that are accessible to all students and exist in every region of the state, reaching 'scale' and full statewide coverage by the year 2000. Assure that all local programs will provide students with an integrated array of learning experiences in the classroom and worksite.

Context. Massachusetts has developed a multi-part strategy for creating local programs that reflect the requirements of the STWOA. Each component of the strategy will result in the implementation (or expansion) of one or more local programs. These strategies acknowledge the contradicting needs to concentrate resources on a relatively small number of locations that have the highest potential to succeed while encouraging the growth of a system through actions in every region of the state.

The heart of our strategies is a system of subgrants to local partnerships, focusing funding and support efforts on partnerships and regions that show the greatest promise of success in creating comprehensive systems of school to work transition. Partnerships will be required, through performance standards, to design programs that meet the challenging requirements of the STWOA. The Commonwealth will take special note of how local partnerships intend to use available subgrant funds; given the venture capital nature of STWOA grant funds, we want to be sure that local partnerships use subgrants in appropriate ways — to build capacity, create products, and design strategies for teacher

and student success — rather than build a local administrative staff or use funds in ways prohibited by the safeguards in the Act. Proposals for grants will be required to establish appropriate portions of funds to meet the needs of at-risk, out-of-school, and disabled youth.

Activities at the state level will be coordinated to support implementation at local sites — skill standards, statewide curriculum, industry development, and certification mechanisms will all be developed at the state level to correspond to the needs of local programs. At the same time, Massachusetts will continue to pursue its broader strategies involving technical assistance, planning, capacity-building of REBs, education reform objectives, and other products as a way of making it possible for a large number of local programs to grow in a brief period of time.

❖ **Task 9.1: Support implementation of regional plans and demonstration local partnerships.**

In March 1994, the MassJobs Council will award planning grants to five REBs to further the implementation of the STWOA at the local and regional levels. Grants will be awarded through a competition, using funds made available to the state from the STWOA state planning grant. A total of \$200,000 will be awarded to local partnerships programs in five different Regional Employment Boards. Funds will be used for two purposes:

- (a) Each REB will prepare a six-year plan for its region to achieve a comprehensive school to work system by the year 2000. These plans, as well as the process used to create them, will serve as valuable models for other regions as they work to devise their own school to work strategies. All regional plans must address each element of the MJC Task Force vision, the STWOA, and identify resources to sustain the system locally. Inventories of current programs, regional economic strategies and plans for the elimination of the general track will all be incorporated into the regional strategy.
- (b) Each REB will also designate and support at least one local partnership within its region to begin implementing a comprehensive school to work model in at least one comprehensive high school beginning no later than the fall of 1994. Local partnerships will be defined according to STWOA. The activities of these local partnerships, in conjunction with the REB, will directly support and enhance an integrated planning process for the region.

❖ **Task 9.2: Connect summer youth programs to the school to work system by building a knowledge-base through *The Summer of Work and Learning*.** In 1991, Governor Weld created a summer jobs program for at-risk youth. The success of the program prompted its expansion to twelve cities. Beginning with the 1994 program, *The Summer of Work and*

Learning will be constructed out of a portion of these existing summer jobs program dollars in order to link current summer efforts with the future year-round school to work system under the STWOA. The Summer program will provide an alternative summer experience for youth by linking current summer job activities with year-round school to work efforts. The program is intended to provide the framework for understanding how teachers and students, schools and private businesses can learn and work together locally, to help lay the groundwork for developing a statewide school to work system. Grants may be requested by local partnerships, which must consist of at least one school, private business, and the REB, and is encouraged to invite the participation of community colleges, community-based organizations, local Employment Service offices, and other appropriate education and training providers.

Competitive grants for the Summer effort were developed jointly by the Executive Office of Education, the Department of Employment and Training, the Executive Office of Labor, and the Division of Apprentice Training. A total of \$360,000 will be made available for innovative programs in the twelve cities targeted by the Governor's At-Risk Youth Summer Jobs Program.

❖ **Task 9.3: Support development of community-wide systems that support the process of school to work transition — Communities and Schools for Career Success.** Bay State Skills Corporation (BSSC) has initiated a partnership with four communities in Massachusetts aimed at helping build their capacity to create comprehensive community-wide systems that help prepare youth for adult responsibilities of further education, training, and employment. The project, known as Communities and Schools for Career Success (CS²), is a multi-year effort of BSSC and the cities of Boston, Brockton, Fitchburg/Leominster, and Springfield with principal funding by the DeWitt Wallace-Reader's Digest Fund, the Massachusetts Department of Employment and Training, and the Noyce Foundation. The CS² approach focuses on four key elements:

- ◆ a coherent career development strategy that enables youth to move through a sequence of age-appropriate programs and opportunities from middle school through high school (including career awareness, college counseling, and work);
- ◆ comprehensive curriculum and instructional reform, specifically the infusion of work-related skills into mainstream academic curriculum;
- ◆ the integrated delivery of human services to youth, including health, mental health, and social work/counseling; and

- ◆ the integrated delivery of services for other family members, including linkages to education, employment-related services, and human services aimed at increasing family involvement in the career and social service activities of their school-aged children.

◆ *Task 9.4: Build on and enrich current promising programs that can be developed into programs under the STWOA. Build experience with the conversion and adaptation of existing school to work programs.* The Commonwealth of Massachusetts is fortunate to host a wide variety of education and training initiatives designed specifically to prepare students to enter the work world. Tens of thousands of students participate in vocational education, cooperative education and Tech Prep programs offered at both the secondary and postsecondary level throughout the state. Thousands more are targeted for drop-out prevention, career services and work-based mentoring by regional programs offered through schools, community-based organizations and REBs. Nearly every necessary element of the STWOA is taking place somewhere in the state at some scale. It is clear, however, that no single program in any district entirely fulfills the federal vision as expressed in the STWOA. Massachusetts must harness and enhance the existing successes to build a complete school to work system that is accessible to every student in the state. The building blocks include:

- The state's **vocational education system** is the largest and most institutionalized form of school-based work preparation offered to students in the Commonwealth. All state-approved vocational programs require a work-based component.
- Tech Prep programs serve more than 4,400 students through 11 different education consortia statewide, involving 111 secondary schools, and 39 postsecondary institutions. Tech Prep is based on a coherent sequence of career-oriented secondary and postsecondary courses and an integrated curriculum in applied academics and vocational-technical training that results in the award of a high school diploma and college credits or an associate's degree. Approximately 145 business and industry partners statewide participate in Tech Prep by offering some worksite training and internships and collaborating on curriculum development. There are 62 articulated technical disciplines and 456 articulation agreements in place statewide.

To illustrate how Tech Prep has been effective in one region, the Merrimack Valley Occupational Tech Prep Educators Colaborative points to the 878 secondary and 116 postseocndary students currently enrolled in Tech Prep programs within the region. By April of 1994, there will be 88 articulation agreements in place with three community

colleges, three colleges, one university, and three private technical institutes. Currently, there are more than 91 high school seniors involved in structured work-based learning programs placed through Tech Prep into youth apprentices-like programs in drafting, electronics, computers, health, and culinary programs.

- **Registered apprenticeship** provides paid work experience, workplace mentoring and results in a skill certificate. Participants are trained through a competency-based curriculum to attain industry-validated skills. The training provides a hands-on learning experience under certified, skilled journeypersons coupled with skill-related classroom instruction.
- **Cooperative education** is designed to connect the school and workplace by employing job developers, career counselors and co-op coordinators who facilitate student placements short-term and long-term. Though reliable numbers aren't available on the participation at secondary schools and private colleges, an estimated 1,200 students are participating with over 800 employers through programs at the community colleges alone.
- Other major work-based programs for youth in Massachusetts include the summer jobs programs offered throughout the state. Funding from the **Job Training Partnership Act (JTPA)** provides nearly 20,000 school-aged youth with summer jobs. These programs combine structured work assignments at public and private non-profit agencies with educational enrichment and vocational training activities.
- **Community and National Service** provides students with valuable exposure to certain types of work experiences. Thousands of students learn and develop through active participation in organized service experiences that meet community needs and that are developed in collaboration with the school and the community.

The Massachusetts Department of Education has committed its staff to work with selected existing programs to assist them in becoming full-fledged STWOA programs over time. This adaptation process will (a) document elements of existing programs; (b) compare existing elements to STWOA requirements; (c) identify gaps; (d) develop plans to fill gaps; and (e) build on this experience base to encourage additional programs to integrate with work-based opportunities. DoE will identify specific programs — in each of secondary cooperative education, Tech Prep, and JTPA youth training — and document the conversion process over the next two years.

- ❖ **Task 9.5: Periodic Grant Competitions for Planning and Implementation.** In Massachusetts, we are following the STWOA model by awarding grants to local partnerships that demonstrate both a willingness to implement a comprehensive school to work system and a strong likelihood of success. The state's first competition to award local partnership planning grants will soon be completed. Massachusetts will establish a regular, periodic series of competitions to be held in the next several years. Some grants will be awarded for planning; others will support implementation when a local partnership can demonstrate that it is ready to implement a program consistent with the STWOA. Competitions will be scheduled to permit an appropriate period of planning, plus the award of implementation funds well in advance of program start-up. This way, we will always have a large number of programs in the developmental stages, and concentrate resources on programs that will offer the greatest chances of success. Splitting grant awards between planning and design also permits the state to coordinate development of skill standards, curriculum frameworks, new curriculum products, and professional development with the creation of programs in new industry areas.

Local partnerships applications must: (a) describe a comprehensive local partnership; (b) describe how local programs will meet the program requirements described in the STWOA; (c) set forth measurable goals and outcomes; (d) describe local strategies and timetables for expanding the program to all students; (e) specifically identify the intended use of federal subgrants showing that funds will be spent on activities permitted under federal law; (f) designate a local fiscal agent; (g) demonstrate how they will limit local administrative costs in order to concentrate the maximum amount of funds on academic and training services to students; and (h) identify specific strategies for addressing the needs of at-risk, disadvantaged, and out-of-school youth, with an appropriate portion of local partnerships expenditures designated to meet the needs of these youth within the community.

- ❖ **Task 9.6: Integrating school-based learning with youth labor market jobs.** According to an analysis of a survey by the Center for Labor Market Studies, about 57 percent of all high school students in Massachusetts currently hold part-time jobs — employment for which there is generally no organized school-based curriculum support or other formal integration. No state can create intensive programs under the STWO for all students in every community in the state. We have to make an honest attempt to reach students in places where they are currently employed, looking for ways to help develop workplace competencies, expose students to 'all aspects of an industry', and help employers move to a higher-skill posture.

Youth employment is concentrated in just a few industries. Fifty-eight percent of employed youth held jobs in retail trade or fast food sectors, and an additional 25 percent were in service industries. Only 7 percent were in construction, transportation, communications, or public utilities (where more than 30 percent of all jobs in the U.S. are classified). Moreover, only about 3 percent of all high school seniors in Massachusetts held jobs in professional, technical, or managerial occupations — jobs that are expected to provide the greatest growth in the national economy in next years.

Recent research in Massachusetts suggests that working while in high school has a positive impact on whether a student finds work after leaving high school. School-to-work, though, needs to be much more explicit than simply getting a job. We need to take existing youth jobs and make them into a platform for learning SCANS skills, developing entry-level qualifications, exposure to TQM and other quality-process efforts, and assure that students who have 'fast food' jobs have access to career pathway jobs (e.g., jobs that are above average in wage level but do not require a college degree).

Massachusetts will encourage employers in industries that employ many high school youth — quick service restaurants, retail outlets, and others — to participate in formalizing integrated school and work programs that: (a) have performance/skill standards; (b) provide pre-employment training for non-school populations; (c) link to management development and other career-ladder positions; (d) take advantage of existing structured on-the-job learning; and (e) lead to a certification of performance through the award of a credential. Many national corporations, even in industries that many people typically think of as lower-skilled service sector jobs, require higher performance and higher skills from their front-line (youth) workforce. As part of the national STWOA process, Massachusetts expects to encourage development of comprehensive career development and training systems within major national corporations.

- ❖ **Task 9.7: Support Boston's efforts to knit together its school to work programs into a comprehensive, community-wide system.** The City of Boston is widely recognized as having one of the most advanced and comprehensive set of school to work programs. For more than a decade, business, education, government, labor and community leaders have been working together in a collaborative manner to explore ways to provide structured work and learning opportunities for youth. This collaboration began in 1980 with the creation of an innovative private-sector summer jobs program and took on formal status with the signing of the original Boston Compact in 1982. In more recent years, business and school leaders expanded the range

of collaborative programs to include a nationally recognized youth apprenticeship program (ProTech) and three career academies. Boston also boasts such school to work programs as the Fenway Middle College effort that links high school students with work-based learning, using Children's Hospital as a worksite, in the pharmaceutical industry.

The newest, and perhaps most ambitious example of a collaborative effort to provide career options for Boston's youth, is an effort to restructure the Madison Park Technical-Vocational High School to prepare students for 'all aspects' of selected industry clusters. The Boston School Committee and School Superintendent Lois Harrison-Jones are fully committed to revitalization and reform, using Madison Park as an opportunity to develop a new structure for education at all of Boston's non-examination (e.g., non-college preparatory) high schools. As part of the Compact, which is built on the principal of creating specific goals and measuring progress toward reaching those goals, participation by the Boston Public Schools assures that Boston is moving toward systemic reform. Boston is the only city in the country where the school committee has committed \$1 million specifically for connecting activities.

The Boston Private Industry Council (PIC) — which is the Regional Employment Board for the City of Boston — has played a critical role in developing and overseeing many of these initiatives. For the past decade, BPIC has served as a forum where business and education leaders strategically planned Boston's youth employment policy.

Boston's approach to school to work transition exemplifies much of what is expected under the STWOA, integrating school-based with work-based learning and providing a wide range of support services through strong connecting activities. Some of the key program elements we will draw from include:

- ◆ **The Boston Compact – The Model 'Connecting Activity.'** In simple terms, the Boston Compact is an agreement between Boston schools and Compact signatories (employers) to use their collective resources to provide greater educational and career opportunities for Boston students. By 1992-93, the signatories to the Boston Compact drafted five new goals: access to jobs and higher education (using STWOA principles); commitment to innovation, comprehensive curriculum, achievable standards and effective assessment methods; training and professional development; and support for parents and families. The strength of the Compact lies in its capacity to generate collaborative ventures that offer direct assistance to students and schools — pioneering the qualities of local partnerships and connecting activities contained in the STWOA.

- ◆ **Job Collaborative — Organized Job Matching.** The Job Collaborative is the Boston PIC's career service program for high school students and graduates. Through the Collaborative, the PIC provides career guidance and job-readiness training to 1,500 students annually. The Collaborative provides students with access to the job market and a clear pathway from school to work. This connection to the demand side of the economy distinguishes Boston from other urban centers nationally, where the youth labor force tends to have only marginal connection to jobs with long-term potential.
- ◆ **The Private-Sector Summer Jobs Program** is an extension of the Collaborative but is described separately because of the higher enrollment goals and the breadth of employer involvement. The Summer Jobs Program operates on a budget of roughly \$665,000 from business contributions and public dollars allocated by the Mayor of Boston from the Governor's At-Risk Youth Summer Jobs Program.

The Summer Jobs Program began in 1980 with 128 job placements, and grew to 3,500 placements in 1990. Today, nearly 700 employers participate in the program. Student wages have consistently averaged \$6 an hour. The program offers valuable exposure to careers, introduces students to the demands of work, teaches them responsibility, and underscores the important connection between school and work.

- ◆ **Project ProTech — Integrated School and Work Learning.** Project ProTech is a nationally recognized youth apprenticeship program, funded initially by a \$900,000 grant from the U.S. Department of Labor. The current operating budget of \$488,000 comes from USDOL, the Massachusetts Department of Medical Security and private funds. Fourteen participating hospitals and financial services employers contribute over \$1 million annually in student wages, scholarships and staff time.

ProTech combines school-based and work-based learning with paid work to prepare students for occupations in health care and financial services. Students spend their junior and senior years of high school and at least two years of postsecondary education learning and developing basic, technical and work-readiness skills in one of the many high demand occupations identified by Boston's participating employers. The integration of school-based and work-based learning through ProTech allows students to understand their educational experiences and activities in the context of the requirements of the working world.

ProTech currently serves a total of 238 students in health services and finance, a number that is expected to continue growing as the program expands to include

environmental services and biotechnology. The budget includes funding for curriculum development, connecting activities of the PIC staff at each of four high schools, professional development for teacher, and stipends for teachers to visit the worksite and develop projects for classroom use linking the academic curriculum to practical problems.

- ◆ **The Academies.** Boston PIC also oversees three career academies in Boston: Travel and Tourism at East Boston High School; Finance at Hyde Park High School; and Public Service at Dorchester High School. The Career Academies were established and initially funded by the American Express Foundation. The program serves 145 students in the three academies. The Academies were born out of a belief that the way to reform workforce preparation was to create partnerships that unite the forces of business and education, with the expressed goal of strengthening the preparedness of America's young people.
- ◆ **Comprehensive Integration of Academic and Vocational Education.** The Madison Park Technical-Vocational High School began a dramatic revitalization effort in 1993, led by Superintendent Lois Harrison-Jones and Boston School Committee Vocational Education Task Force chair (and MJC School to Work Task Force Co-Chair) William Spring. As a result, Boston's vocational education complex has been restructured into four academies organized around industry clusters and a fifth academy that allows 9th graders to explore a variety of academic and occupational options.

The revitalization effort creates 'schools within a school' that allow teachers to structure their classrooms so that learning happens through hands-on situations that develop students' communication, critical thinking and decision-making skills.

The Madison Park Technical-Vocational High School serves the largest single number of students engaged in school to work activities. It is a laboratory for experimenting with the most innovative academic and vocational ideas around school to work programming such as: increased teacher collaboration, a common core of learning, common planning time, project-based learning, the integration of academic and vocational education, new governance, strong employer participation, all aspects of industry and portfolio assessment.

- ◆ **Well-established alternative education efforts.** With more than 600 students enrolled in alternative education programs, Boston is rare among major urban communities in having made significant commitments of time and money to organize non-traditional

learning opportunities for students who have left the public system. Boston Public Schools fund three alternative education providers, who help students meet diploma requirements.

- ❖ **Task 9.8: Learn from the school to work experiences of charter schools.** With the passage of the Education Reform Act of 1993, the Massachusetts Secretary of Education was granted authority to approve up to twenty-five 'break-the-mold' charter schools in the Commonwealth to begin operation in 1995. From an applicant pool of over 60 prospective schools, the state has granted conditional approval to 15 schools that are scheduled to be operational in the fall of 1995. These schools are publicly funded but will be controlled by a variety of partnerships that include teachers, parents, business representatives and community colleges and private universities.

Charter school applications proposed a variety of organizational, philosophical, and instructional themes. While several applications proposed explicit school to work themes, one approved school is of particular interest. The Lowell Middlesex Academy Charter School is based on the Middle College model developed by New York City's LaGuardia Community College. It will provide an academically challenging environment for at-risk youth (ages 16-22). The school intends to implement a new curriculum that departs from the traditional, lecture-oriented approach. Instead, interdisciplinary and hands-on activities, community service and job internships, will be combined in an integrative fashion. The school will increase its involvement with the college's 2+2 Program (allowing high school students who participate in college classes to receive both high school and college credit).

In the coming years, EoE will carefully assess the role of charter schools in supporting school to work transition of Massachusetts' high school students. The Secretary will (a) review the operation of schools such as Lowell Middlesex Academy to determine how they relate to local and regional plans for school to work transition; (b) understand the impact of charter schools that have a school to work theme on the offerings of public comprehensive and vocational high schools; and (c) encourage the development of new applications for charter school status to specifically link high schools, community colleges, and worksites using a formal STWOA model.

- ❖ **Task 9.9: Implement connecting activities facilitation and grant process.** The local offices of the Department of Employment and Training will work in conjunction with the REBs to

facilitate the development of local partnerships and all connecting activities involved in the initial stages of program operation, such as recruiting and mobilizing employers, providing technical assistance, and developing program models. In addition, the STW Committee will provide grant funds to additional communities to develop innovative models of that demonstrate connecting activities.

10.0 Career Counseling

Goal: Develop a system of career counseling that ensures that all students receive the information, support and guidance needed to select an appropriate educational career pathway and to make a successful transition from secondary education to post-secondary education or a quality first job.

Context. As the Massachusetts school-to-work system grows, counselors will be expected to assume an even more active role in preparing students for employment. A counseling system must address the career preparation of all students rather than focusing narrowly on connecting students to four-year colleges. Under the Massachusetts system, counselors will be particularly important in the processes of developing individual education strategies for every student in the 8th grade, and selection of a career major at the end of the 10th grade. Counselors will also have an important role in supporting out-of-school youth, at-risk youth and youth with disabilities, and in encouraging women and minorities to pursue pathways to non-traditional occupations.

The state has several foundations on which to build:

- On March 10, the Massachusetts Department of Employment and Training (DET), the Occupational Information Coordinating Committee, the School Counselors Association and the Career Development Association sponsored 'School-to-Work: Career Counseling for Change' a teleconference devoted to the counselor's changing role. This group explored the roles of counselors and processes for career planning and for building local partnerships that strengthen career exploration programs.
- The Career and Learning Line, operated by the Higher Education Information Center, is a toll-free telephone service which students, parents, adults, counselors and others can call for answers to questions about education programs, financial aid and careers.
- DET and education experts across the state have been working together to offer teens several year-round programs that provide the basic career and job market information they need to succeed in a changing, global economy. In the summers of 1992 and 1993, DET offered guidance

counselors, work study coordinators and business and vocational teachers the opportunity to be paid to work in local DET offices. In addition to exploring the labor market, meeting with employers and providing career counseling, these educators used their work experience to help place high school graduates into jobs.

- In 1994, DET will reach even more students through an agreement with the Massachusetts Corporation for Educational Telecommunications (MCET). Through this partnership, DET will broadcast school-to-work sessions on MCET's cable network, reaching a potential 255 school districts across the state. These interactive sessions will use a multi-media approach and provide students with information on critical job search topics — self-assessment, knowing the labor market, finding and keeping employment, building a successful network, and personal resource management.

- ❖ **Task 10.1: Support the professional development of counseling personnel.** The Education Reform Act requirement to develop professional development plans at the school level encompasses most professional school personnel, with particular emphasis on the professional development of counseling personnel. DoE has addressed this component as an element in its statewide plan for professional development. A funding schedule for these efforts is also set out in the Education Reform Act.

- ❖ **Task 10.2: Develop counseling strategies to support the elimination of the general track.** DoE is currently assisting schools in developing appropriate plans to eliminate the general track. A component of these plans will address local strategies to provide enhanced career education and counseling beginning at the earliest possible years. At present these strategies are expected to include the three broad functions of counseling as identified by the American Counseling Association, including:
 - **Career Counseling:** goal setting; self exploration, including assessment tools; decision-making; understanding trends and personalizing information in shaping one's own plans; exploring the work world and the changing nature of work; exploring postsecondary options; developing a career portfolio; and examining the influence of race, class, gender and disability on one's options and choices.
 - **Program Development and Coordination:** skills needed to interact positively with others; understanding the impact of growth and development; understanding the relationship between educational achievement and career planning; understanding the need for positive

attitudes toward work and learning; acquiring the skills to locate, evaluate and interpret career information; mastering the skills needed to seek, obtain, maintain and change jobs; understanding how societal needs and functions influence the nature and structure of work; understanding the continuous changes in male and female roles; and skills in career planning.

- **Advocacy:** Promote gender and racial equity and disability awareness; involve parents in the growth, development and decisions of their children in career planning; coordinate parenting sessions; and follow students in a sequential process.

11.0 System Expansion

Goal: Assure that students in all parts of the state, including communities that have a high concentration of poor or disadvantaged youth, will have an opportunity to participate in a school to work opportunities program within a reasonable amount of time.

Context. The goal of achieving statewide coverage is inherent in this implementation plan.

Specifically, the Commonwealth will assure the rapid spread of the system by:

- requiring every REB to submit an annual plan for school to work transition within the region and to take active steps to convene and encourage the creation of local partnerships;
- conducting an inventory of existing school to work programs within each school, in order to encourage promising models to adopt all elements of the STWOA;
- requiring school districts to eliminate the general educational track, and broadening the reach of Perkins vocational education funds — both of which represent the first of major changes in the structure of educational delivery to high school students that will bring comprehensive and vocational high schools to search for new school to work models;
- the active efforts of community colleges and Tech Prep consortia statewide to encourage integrated school and work programs; and
- strong ties to regional industry clusters, which provide a strategic organizing vehicle to initiate programs in every region.

12.0 Assuring Access for Students with Disabilities

Goal: Assure that students with disabilities will have an opportunity to participate in School to Work Opportunities programs in a manner that leads to employment in high-performance, high-paying jobs.

Context. The Massachusetts system for school to work transition will be accessible to students with disabilities. That is, all programs and services will be free from physical and attitudinal barriers to students with disabilities. No opportunity will be denied solely on the basis of disability, and reasonable accommodations necessary for the student to benefit from school to work programs will be assured. Many services already being organized on a systemic basis for disabled students are the same core components of school to work transition for all students. These include:

- ❖ the preparation of an individual transition plan (for disabled students served under Mass. Gen. Laws Chapter 688), for students with disabilities in accordance with the Individuals with Disabilities Education Act;
- ❖ the development of whole life planning for students 14 years of age and older, which parallels the intensive, developmentally-oriented holistic career counseling envisioned in the STW system;
- ❖ use of a resource or case manager to help identify student and family needs and provide coordinated access to local resources, which parallels the STWOA's connecting activities functions; and
- ❖ the use of coordinated regional and local resource transition resources, which under the Massachusetts Transition Initiative (MTI) proceeds under the guidance of Regional Employment Boards — using the same coordination process defined for Regional Employment Boards in school to work transition.

Students with disabilities are specifically targeted for school to work service by the Massachusetts Transition Initiative (MTI), a systemic initiative funded by a five-year federal grant received in 1992. The Department of Education, the Massachusetts Rehabilitation Commission and the Training and Research Institute for People with Disabilities are working collaboratively with the Department of Mental Retardation, the Department of Employment and Training, the Federation for Children with Special Needs, school districts, and many other state and community agencies to promote implementation of effective transitions from school to adult life for all students with disabilities 14 years of age or older. A crucial part of this project is the involvement of the business community and the inclusion of real work experience as part of the student's Individual Education Plan.

MTI uses the Regional Employment Boards as the central point of focus to implement individual transition teams at the high school level. Regional Employment Boards also help connect students and transition teams to local labor market demand.

- ❖ **Task 12.1: Link implementation of the Massachusetts School to Work System with the Massachusetts Transition Initiative.** The MTI, as a systemic initiative, works through the Regional Employment Board to convene regional transition planning teams that will coordinate delivery of services needed by students with disabilities. The MJC will require each REB to submit, as a part of its annual report and plan for school to work transition, a component that addresses regional activities on behalf of students with disabilities.
- ❖ **Task 12.2: Representation.** Massachusetts will require local partnerships to include representation of organizations that advocate for students with disabilities.
- ❖ **Task 12.3: Local strategies.** Massachusetts will require local partnerships, when they compete for planning or implementation grant funds from the state, to include specific strategies for assuring access by students with disabilities in school to work programs.

13.0 Assuring Access for At-Risk and Out-of-School Youth

Goal: *Assure that youth who are at-risk, enrolled in alternative education and those that have re-entered the educational systems through community colleges have access to work-based learning experiences and the same certificates and credentials.*

Context: For many students, especially those facing enormous pressures in their lives, the public school system may not provide an environment that is conducive to academic achievement. The Boston Public School system has led the way in developing a comprehensive alternative education system. Currently Massachusetts is facing up to the tremendous challenge of re-engaging the 9,000 students who drop-out each year and creating strategies that will focus on drop-out prevention for those students who are at risk. Simultaneous to the development of the school to work system, the Commonwealth is developing a strategy for providing educational alternatives. This gives us the remarkable opportunity of building school to work programs into the initial design and development of alternative education programs.

In Massachusetts, community colleges play a major role in addressing the education needs of out-of-school youth. They have build well-integrated curricula to move students all the way from mastery of English as a Second Language through adult basic skill acquisition to full GED attainment. Most programs give students sufficient extra services, support, and counseling, and offer the kinds of non-

traditional approaches to teaching that many out-of-school youth need. In the developing system, community colleges will take a lead role in working with community-based organizations and the alternative school network, building the same opportunity for out-of-school youth as those in the 'mainstream.'

At-risk program planners have been active in considering connections with the STWOA initiative. Depending on the individual needs of students, these connections will include:

- ❖ Assuring that students can attain a GED through a combination of classroom and worksite learning at the high school level, providing support services and connecting activities. Under this approach, the program would be organized to meet statewide industry skills standards as well as provide academic skills certified through the competency determination, CAM, and GED certificate.
- ❖ Using structured programs as a tool to remediate high school dropouts, bringing their academic skills to the level of the state's 10th grade competency determination then encouraging enrollment in a School to Work Opportunities Program at the postsecondary (community college) level.
- ❖ Designing programs that would provide academic learning through alternative classes but mix eligible youth with students from public schools for purposes of work-based learning. Under this approach, for example, the YouthBuild model would expand into other industries beyond construction but continue to provide education through alternative learning mechanisms as well as providing the intensive counseling and support services youth often need to succeed.
- ❖ **Task: 13.1: Develop and implement task force recommendations as called for in the Education Reform Act.** The Education Reform Act calls for a task force led by the Commissioner of Education and the Attorney General to develop recommendations regarding alternative education. Furthermore, the legislature has called upon the MassJobs Council to develop recommendations for educating those students that have been expelled from school.

It is expected that both studies will recommend that alternative education programs have strong school to work program components. After the two task forces have submitted their recommendations, the School To Work Committee will develop a strategy to coordinate and monitor the provision of school to work programs for at-risk youth.

- ❖ **Task 13.2: Comprehensive Participation.** Massachusetts will require every local school to work partnership to include representation of community-based organizations that advocate for at-risk students and out-of-school youth.

- ♦ **Task 13.3: Local strategies.** Massachusetts will require local partnerships, when they compete for planning or implementation grant funds from the state, to include specific strategies for assuring access by at-risk students in school to work programs. The state will require all local partnerships to develop specific strategies for dropout recovery — reaching out to students who are no longer in the public education system. In most cases, this will involve the services of community-based organizations, which traditionally have the strongest contacts with youth that have dropped out of school. Some strategies in some communities will necessarily encourage students to return to the public school system, soliciting students who are attracted by structured school and work learning that characterizes a School to Work Opportunities Program. Communities will also have to recognize that they must create alternative pathways for many dropouts for whom returning to a public school is an unrealistic expectation.

14.0 Assuring Access for Women and Minorities in Nontraditional Occupations

Context. Gender and ethnic diversity in the school to work system is a clear statewide goal.

Massachusetts has established a student-oriented model for addressing equity in career and vocational education. Our goal is not limited to providing equal opportunity, access, and treatment. Instead, the state has established equity goals that seek equal educational outcomes. Our process falls into three simple strategies:

- empower women and minorities to choose nontraditional training or learning pathways;
- empower women and minorities to complete their education in a structured pathway; and
- encourage schools, employers, and intermediaries to provide the support systems that make it possible to overcome barriers that make it difficult to achieve equity.

Each program that applies for STWO funds will be required to develop a five-part plan to address equity goals. Each program will develop specific strategies for:

- building awareness, commitment and direction (e.g., make accessible to all staff and students copies of state and federal legislation and regulations; identifying barriers; assess all classroom and worksite material for overt or covert bias);
- assessment, which examines enrollment statistics and staffing patterns as well as uses student and staff surveys to establish a baseline against which future progress and success can be measured;

- planning, which establishes objectives, activities and timelines into a plan that is customized to local needs;
 - action, in which local partners implement an equity plan through specific tasks designed to generate specified student and staff competencies related to equity (summer orientation programs; specific recruitment of females and minority group members; identification of female/ethnic mentor role models; involvement of parents to support student choices; additional jobsite visits; support groups; newsletters; student participation in professional organizations; special tutoring, enforced consistent discipline; staff training); and
 - evaluation, which examines changes that have occurred as a result of the plan.
- ❖ *Task 14.1 Recruit employers who see school to work programs as an avenue for meeting diversity and equity workforce goals.* Many employers view school to work programs as an opportunity to help generate a workforce that is more equitable with respect to gender and ethnic diversity. Employer recruitment strategies will emphasize this aspect.
- ❖ *Task 14.2: Integrate equity competencies into all school to work program standards.* Massachusetts will strive to include specific equity competencies in all school-based and work-based standards to assure full exposure by all students to equity goals.

15.0 Employer Recruitment

Context. The first step in developing an employer recruitment strategy is to work with a number of individuals from private industry to develop a broad marketing strategy. Although employers are well aware of the issues of the deficit of skills offered by our youth and although they may even be aware that they can be part of the solution, the costs, even the time investment alone, may be a barrier. Therefore, the marketing strategy will identify both short and long term benefits of school to work programs for various sectors of the business community. For example, those businesses that are location-sensitive may have a greater interest in both mobilizing their private industry peers as well as offering school to work programs.

Employer recruitment strategies will be developed around the statewide economic development strategies and regional economic opportunities. Thus, at a state and regional level, recruitment efforts will be aimed at those current and emerging industries that have organized themselves into clusters.

Furthermore, the industry cluster brokers will include recruiting school to work participants in their general organizing efforts.

The second strategy is to target recruitment efforts at those occupations that are growing, regardless of the industry. The Northeastern Center for Labor Market Studies has provided each region with information about the increase or decrease in specific occupations that offer career pathways. Regional Employment Boards and local school partnerships will recruit firms that have occupations that are growing.

The third strategy is to recruit firms that are high performance organizations. These organizations offer work-based learning that is fully incorporated into the culture of the organization and cross-training efforts. It will be beneficial to all involved that these placements are for six months to a year as success in high performance work organizations requires broad knowledge of the operations.

The fourth strategy is to convert the jobs that youth currently hold into work experiences that develop their skills and knowledge of industries. The goal will be to develop transferable skills, including critical thinking skills, that the students can apply both in their next job and in making choices about their careers.

Finally, those agencies involved in providing connecting activities will be expected to provide training for students regarding how to find their own work experiences if they have specialized interests or skills.

- ◆ **Task 15.1: Evaluate the role of tax incentives to encourage employer participation.** The MJC STW Task Force has requested the Massachusetts Department of Revenue to make recommendations regarding the issue of tax incentives to encourage employers to provide work-based learning opportunities for students under the new system. We have been watching carefully the value of incentives that exist in others states (e.g., Wisconsin, Maine), which provide a tax credit or deduction related to the amount of wages paid students through youth apprenticeship programs. While some policy groups believe that incentives have not proved necessary, at least for the first employers that have participated in national demonstration programs, we believe that recruiting employers at the scale that is necessary to implement a statewide system will require some form of incentive.

Recommendations made by the Department of Revenue will be considered by the STW Committee and MassJobs Council, and forwarded to the Governor and Legislature for action.

- ◆ **Task 15.2: Recruit employers through the efforts of statewide industry associations.** The task of creating school to work transition programs for targeted industries necessarily involves

action at both the state and local levels. At the state level, employers within industries will be convened in the process of creating statewide skill standards. At the local level, partnerships will bring together schools, community colleges, employers, and other organizations to design and operate school to work programs. Both efforts will proceed in coordinated fashion, with standards being developed for industries where there is interest in creating operational programs in communities.

The Commonwealth has the active support of employer associations such as the Associated Industries of Massachusetts, the Massachusetts Business Roundtable, and the Governor's Council on Economic Growth and Technology, who have agreed to actively recruit their membership to generate program partners, and solicit commitments of work-based learning opportunities for students.

❖ ***Task 15.3: Target 'high performance' employers for recruitment by local partnerships.***

Massachusetts has several listings of employers who are self-identified as 'high performance' organizations. For example, we have a state 'Deming' award (like the national Malcolm Baldrige Award) for which corporations compete based on their quality orientation. In addition, we can construct a comprehensive database of employers that have had some involvement with Total Quality Management. Our strategy is based on the understanding that employers who have committed to quality and high performance means of organizing work are the most likely to support programs that actively use the workplace as a learning environment for workforce development.

Massachusetts will develop a listing of all quality-oriented private-sector organizations for purposes of encouraging Regional Employment Boards and local partnerships to target for initial recruitment.

❖ ***Task 15.4: Recruit employers who provide most youth jobs to engage in structured school and work learning programs.*** Massachusetts will reach students 'where they are' — that is, formalizing learning by using traditional youth jobs as a core part of the state's effort. We will focus much of our systemic efforts on converting youth jobs into opportunities to develop specific workplace competencies and as a foundation from which to learn all aspects of an industry.

❖ ***Task 15.5: Use the network of 'cluster training brokers' to recruit the active participation of employers within regions.*** Selected industry clusters in Massachusetts have developed, in

conjunction with various government agencies, cluster-specific training programs to meet the needs of their respective industries. We have active cluster-networks in biotechnology, machining (metalworking), and software development. In each case, an individual or organization evolved into a 'cluster training broker' to function as a catalyst in translating an interest in training into specific programs that respond to actual skill requirements of the industry. The CTB worked with industry to define common training requirements, collaborated with agencies to find the necessary funding, and then monitored the performance of the programs themselves.

- ❖ *Task 15.6: Use the network of employment specialists to recruit the active participation of employers within regions.* A valuable resource to recruiting employers will be the employment specialists who work in community colleges, state

universities, Department of Employment and Training, and vocational and training providers. The specialists can provide assistance in structuring a work experience that meets the needs of both the employer and the student.

16.0 Mentor Training

The availability of mentors, supervisors and worksite trainers who have the capacity and ability to construct meaningful workplace assignments and experiences will be critical to establishing a system of work-based school to work transition. Accordingly, the STW Committee will contract with a private sector entity, third party intermediary, and/or community college to develop an in-depth program to train worksite mentors and trainers to participate in STWOA programs.

We anticipate the development of this strategic component to have the following characteristics: (a) building a mentor training capacity is a major task to be funded directly by the STWOA implementation grant; once established, it will likely be self-funding through tuition paid by the employers that send staff for training; (b) a general description of mentor training programs (topics, duration, instructional methods, curriculum outline) will be developed by the STW Committee in consultation with the five Regional Employment Board partnership programs that receive planning grants, combined with a careful analysis of existing mentor training programs as they have developed in national demonstration sites; and (c) regional partnerships at the Regional Employment Board level will be expected to designate mentor trainer(s) within their region; most likely, a community college will be encouraged to offer periodic courses in mentor training on behalf of employers within the region.

Mentor training will be required of all individuals that guide or are responsible for a student's worksite learning. A portion of the training process will be an assessment to assure that the mentor-trainee can demonstrate all competencies expected of a student learner. The assessment of mentors will take place in a manner that reflects authentic assessment of students.

Commonwealth of Massachusetts

Project Workplan: School to Work Opportunities System

Goal	Task	6	12	18	24	30	36	42	48	54	60	Responsibility	FY 95 Funding
1.0 Governance	1.1 Create STW Committee	•										Governor MJC, EoE	\$0
	1.2 Create staff unit	•										MJC, EoE & MJC/STW	\$15,000 in-kind \$307,790 STWOA
	1.3 Designate agency working group	•										MJC/STW, EoE	\$160,000 in-kind
	1.4 Link to MassJobs Council	•										MJC & MJC/STW	\$0
	1.5 REB Operations											MJC, MJC/STW REBs	\$0
	1.6 Create regional STW committees											REBs	\$80,000 STWOA Planning Grant
	1.7 Local partnership development		•	•	•	•	•	•	•	•	•	Local stakeholders REB	\$0
	1.8 EoE as Fiscal Agent	•										EoE	\$22,379 overhead from STWOA grant

Commonwealth of Massachusetts													
Project Workplan: School to Work Opportunities System													
Goal	Task	6	12	18	24	30	36	42	48	54	60	Responsibility	FY 95 Funding
2.0 Education Reform	2.1 Eliminate general track	•										School districts	\$250,000 Perkins
	2.2 Common Core of Learning	•										Common Core Commission, BoE	in-kind
	2.3 Curriculum frameworks		•	•		•						DoE	\$200,000 state funds
	2.4 Competency Determination			•								DoE, BoE	\$0
	2.5 COP			•								DoE, BoE	\$0
	2.6 CAM				•							DoE, BoE	\$0
	2.7 Student Assessment				•							DoE, BoE	\$0
	2.8 Time and Learning			•								Task Force, BoE	in-kind

Commonwealth of Massachusetts														
Project Workplan: School to Work Opportunities System														
Goal	Task	6	12	18	24	30	36	42	48	54	60	Responsibility	FY 95 Funding	
5.0 Evaluation	5.1 Peer review process											MJC/STW; REBs	<div>\$100,000 STW/OA</div> <div>→</div>	
	5.2 Common data		•									MJC/STW		
	5.3 Sample local evaluation protocols		•									MJC/STW		
	5.4 Program evaluations											MJC/STW		
	5.5 State funds for evaluation											MJC/STW		
	5.6 System benchmarks			•		•		•		•		MJC/STW, EoE		

Commonwealth of Massachusetts													
Project Workplan: School to Work Opportunities System													
Goal	Task	6	12	18	24	30	36	42	48	54	60	Responsibility	FY 95 Funding
6.0 Technical Assistance	6.1 REB roundtables		•		•						•	REBs	\$1,900,000 STWOA
	6.2 Technical assistance to REBs											DET, MJC, BSSC MJC/STW; DoE	
	6.3 STW program inventories											REBs; schools, comm colls	
	6.4 Technical assistance to local partnerships											REB, comm colls, schools	
	6.5 STW Institute		•		•		•	•	•		•	MJC/STW	
	6.6 Model Programs										•	MJC/STW; REB, EoE	
7.0 Professional Development	DoE Tasks											DoE	\$1.8 million Carl Perkins

Commonwealth of Massachusetts
Project Workplan: School to Work Opportunities System

Goal	Task	6	12	18	24	30	36	42	48	54	60	Responsibility	FY 95 Funding
8.0 Links to Higher Education	8.1 Articulation											EoE; HECC	\$0
	8.2 Dual Enrollment, uniform tuition charge											EoE; HECC	\$250,000 Mass appropriation

Commonwealth of Massachusetts
Project Workplan: School to Work Opportunities System

Goal	Task	6	12	18	24	30	36	42	48	54	60	Responsibility	FY 95 Funding
9.0 Local Programs	9.1 1994 planning grant	•										MJC/STW, EoE	\$200,000 STWO Planning Grant
	9.2 Summer of Work and Learning	•		•		•		•		•		MJC/STW; DET; EoE	\$360,000 Mass Appropriation
	9.3 CS2											BSSC	\$100,000 JTPA
	9.4 Conversion and adaptation strategy											DoE; CC; schools; REBs	\$1,000,000 JTPA and Perkins
	9.5 Annual grants	•	•	•	•	•	•	•	•	•	•	MJC/STW, EoE	\$5.2 million STWOA
	9.6 Programs for youth jobs											REBs; local partnerships	
	9.7 Boston strategy											Boston, MJC/STW	(local grant)
	9.8 Charter schools											EoE	\$0
	9.9 Connecting Activities	•	•	•	•	•	•	•	•	•	•	DET; REB	\$800,000 ES \$100,000 MJC

Commonwealth of Massachusetts														
Project Workplan: School to Work Opportunities System														
Goal	Task	6	12	18	24	30	36	42	48	54	60	Responsibility	FY 95 Funding	
10.0 Career Counseling												DoE	see Prof. Dev.	
												various	\$0	
11.0 System Expansion														
12.0 Access for students with disabilities	12.1 Link with MTI											MJC/STW, DoE, EoE, MRC	in-kind	
	12.2 Representation on local partnerships											local partnerships	local grants	
	1.3 Local strategies											local partnerships	local grants	
13.0 Access for at-risk and out-of-school youth	13.1 Representation on local partnerships											MJC/STW, DoE,	in-kind	
	13.2 Local strategies											local partnerships	local grants	

Commonwealth of Massachusetts														
Project Workplan: School to Work Opportunities System														
Goal	Task	6	12	18	24	30	36	42	48	54	60	Responsibility	FY 95 Funding	
14.0 Access by women and minorities to NTO	14.1 Recruitment of firms											Local partnerships	local grants	
	14.2 Technical assistance											REBs	local grants	
	14.3 Competencies											Eoe, MJC	in-kind	
15.0 Employer Recruitment	15.1 Tax Incentives		•									MJC	\$0	
	15.2 Trade Associations												\$300,000 MJC	
	15.3 High performers												→	
16.0 Mentor Training	15.4 Youth job providers													
			•									MJC/STW	cost recovery	

Grant Expenditures: 5-Year Budget Detail

Cost Category	Calculation	Year 1	Year 2	Year 3	Year 4	Year 5
1. Personnel						
STW Committee Staffing	4 FTEs, annual salaries: 1 \$60,000 1 \$45,000 1 \$30,000 1 \$26,000 plus 3% increase per year	161,000	165,830	170,805	175,929	181,207
2. Fringe Benefits	39% of direct salaries	62,790	64,674	66,614	68,612	70,671
3. Travel	\$5,000 per FTE per year (includes conference fees)	20,000	20,000	20,000	20,000	20,000
4. Equipment: Office furniture & equipment	\$7,500 per FTE in Year 1 \$3,000 per FTE in Yrs 2-5	30,000	12,000	12,000	12,000	12,000
5. Supplies	\$4,500 per FTE per year	18,000	18,000	18,000	18,000	18,000
6. See narrative, next page		7,600,000	7,600,000	7,600,000	7,600,000	7,600,000
7. Other	Telephone @ \$500/month Printing & Postage @ \$10,00/year	16,000	16,000	16,000	16,000	16,000
8. Indirect Cost	10% of payroll & fringe	22,379	23,050	23,742	24,454	25,188
10. Training Cost/Stipend	none	0	0	0	0	0
Total		\$7,930,169	\$7,919,554	\$7,927,161	\$7,934,995	\$7,943,066

Budget Narrative: Contractual Services and Local Grants

The preponderance of the federal implementation grant will be distributed through periodic competitive procurement to local partnerships to establish programs and connecting activities. A portion of the grant will be reserved for development activities conducted at the state level and administered by the School to Work Committee. **These funds will be used for the following activities:**

Skill Standards and Assessment. The MassJobs Council has committed a portion of its state appropriation, coupled with an allocation of Perkins State Leadership funds, to begin skills standards development beginning in July, 1994. Federal grant funds will enhance this activity. Education reform appropriations will be used to develop curriculum frameworks for these skill standards in subsequent years and assessment instruments and systems will be developed collaboratively at the state level funded from state and federal sources. It is anticipated that skill standards and assessments—with corollary developments of curriculum frameworks—will be developed for three or four industries a year for five years.

Technical Assistance. The most important function to jump-start the development of the Commonwealth's school-to-work system, technical assistance is intended to support a wide array of activities—program design, professional development planning for educators, counselors and workplace mentors, integration of curriculum, program evaluation and self-assessment, student assessment techniques and systems development—at local and regional levels by developing resource materials, guides, training seminars and conferences. These efforts will be complementary and integrated with

technical assistance provided by the MassJobs Council to develop Regional Employment Board capacity and the Department of Education to implement education reform. The amount is reduced over the five-year period of the grant, reflecting a "train the trainers" approach and the increasing expertise and capacities of local partnerships.

Evaluation. Initially, funds will be used to develop the self-assessment and peer review process outlined in the application narrative. Out-year funding will be used to support the peer review teams and associated operational costs. It is expected that local partnerships will increasingly employ local resources for evaluation.

Public Information and Education. These funds will be in conjunction with state funds for a variety of activities to mobilize public opinion and to offer resources to the general public. State resources include:

The Executive Office of Education's Parent Information Center (PIC) which currently offers school district information, is broadening its scope to include vocational program information and will be able to offer information on school-to-work programs as they come on line. The state's technology plan, **Mass Ed On-Line**, will begin implementation in SFY 1995 and will develop, in conjunction with the Placement Accountability System, career exploration, post-secondary career opportunities and job placement information systems, linking schools, libraries, higher education institutions and businesses. In addition, public service announcements will be produced and aired. In Year 1, federal planning grant funds will supplement implementation funds for a total of \$90,000 allocated to these activities.

Cost Category	Year 1	Year 2	Year 3	Year 4	Year 5
Local Grants	\$5,200,000	\$6,000,000	\$6,800,000	\$6,800,000	\$6,800,000
Technical Assistance	1,900,000	1,000,000	300,000	300,000	300,000
• Workplace Assessment, Yr 1	300,000	300,000	250,000	250,000	250,000
• Skill Standards Yrs 2-5					
Evaluation	150,000	200,000	200,000	200,000	200,000
Public Education & Information	50,000	100,000	50,000	50,000	50,000
Total Contractual	\$7,600,000	\$7,600,000	\$7,600,000	\$7,600,000	\$7,600,000

Fiscal Year 1995 State Cost Sharing and Additional Federal Resources

Cash Contributions					
Activity	Amount	State Source	Amount	Existing Federal Sources	
Skill Standards	500,000	House 1, MassJobs Council	\$250,000	Perkins State Leadership Funds	
Curriculum Frameworks	200,000	House 1, Education Reform			
Placement Accountability System (PAS) & Networking Activities	200,000	House 1, Education Reform		JTPA Local Assessment	
				JTPA Governor's Education Grant	
				Perkins State Leadership Funds	
Connecting Activities	100,000	House 1, MassJobs Council		Governor's 10% Employment Services Grant	
				JTPA Governor's Education Grant	
Dual Enrollment	250,000	House 1, Education Reform			
Local Planning			280,000	Federal STW Planning Grant	
Mobilizing Public Opinion			40,000	Federal STW Planning Grant	
Summer of Work and Learning	360,000	House 1, Governor's Summer Jobs Program			
Elimination of General Track			250,000	Perkins Leadership Funds	
Organizing Employers for School-to-Work	300,000	House 1, MassJobs Council			
Enhancing Existing STW Programs			860,000	JTPA Governor's Education Grant	
			140,000	Perkins Leadership Funds	
In-Kind Contributions					
STW Committee Staff	15,000	State Office Space			
Dedicated Agency Staff	80,000	MJC & DOE		EOE & DET	
Total SFY 1995	\$2,005,000	State Appropriations	\$3,360,000	Redirection of Federal Resources	

Five-Year Cost Sharing: Budget Detail

Sources of Funds	Year 1	Year 2	Year 3	Year 4	Year 5
Education Reform *					
Mass Ed On-Line	200,000	250,000	300,000	400,000	500,000
Curriculum Frameworks and Student Assessment	200,000	250,000	500,000	1,000,000	1,000,000
Dual Enrollment	250,000	300,000	400,000	400,000	400,000
MassJobs Council	900,000	1,000,000	1,000,000	1,000,000	1,000,000
Summer of Work & Learning	360,000	750,000	1,000,000	1,000,000	1,000,000
In-Kind Contribution	95,000	97,500	100,000	102,000	104,000
Total	\$2,005,000	\$2,647,500	\$3,300,000	\$3,902,000	\$4,004,000

Sustainability. Assuring that the statewide school to work system will be properly supported by continued funding over the long term, especially as STWOA funds expire (our strategies here include (a) assuring that local partnerships spend federal subgrants to support program-building and capacity-building activities rather than use funds for recurring administrative or operational costs; (b) build a base of experience, informed by local partnerships, of how waivers of a range of related federal categorical programs can be used to fund STWOA activities; and (c) coordinate additional funding available to school districts as increased local aid under the Education Reform Act).

